SHARP

Langenscheidt Handwörterbuch Englisch
Langenscheidt Handwörterbuch Französisch
Duden – Die deutsche Rechtschreibung

MODEL

PW-E420

ELECTRONIC DICTIONARY

OPERATION MANUAL

Garantieurkunde für Sharp Electronic Dictionary PW-E420

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Alternativ wenden Sie sich bitte an Ihren Händler, von dem Sie das Gerät gekauft haben.

Garantiegeber
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D-20097 Hamburg
www.sharp.de/electronic-dictionary/

Introduction

Thank you for purchasing the SHARP Electronic Dictionary, model PW-E420.

The PW-E420 contains data based on the following dictionaries (see page 7):
- Langenscheidt Handwörterbuch Englisch
- Langenscheidt Handwörterbuch Französisch
- Duden – Die deutsche Rechtschreibung

After reading this manual, store it in a convenient location for future reference.

NOTICE
- SHARP will not be liable nor responsible for any incidental or consequential economic or property damage caused by misuse and/or malfunction of this product and its peripherals, unless such liability is acknowledged by law.
- The specification of this product and its accessories, as well as information provided in this manual, is subject to change without prior notice.

CAUTION
- Do not carry the PW-E420 in the back pocket of slacks or trousers.
- Do not apply excessive physical pressure on the LCD panel because the glass material may break.
- Do not drop the PW-E420 or apply excessive force to it. Bending the unit unduly can damage it.
- Do not subject the PW-E420 to extreme temperatures. Do not expose the unit to an extremely humid or dusty environment.
- Do not apply extreme force when pressing the keys.
- Sharp or hard objects can scratch and damage the unit. Make sure it is adequately protected when carried with other objects.
- Since this product is not waterproof, do not use it or store it where fluids, for example water, can splash onto it. Raindrops, water spray, juice, coffee, steam, perspiration, etc. will also cause malfunction.
- Clean only with a soft, dry cloth. Do not use solvents.
- Use only a SHARP approved service facility.

NOTES
- All company and/or product names are trademarks and/or registered trademarks of their respective holders.

Fast and clever – Look up and explore

You made a good choice with the electronic dictionary PW-E420!

The PW-E420 was developed in close cooperation with the two leading dictionary publishing companies in the German speaking market, Langenscheidt KG and Duden, whose book contents have been integrated into the electronic device.

The intuitive operation of the device follows the usage of the printed dictionaries, but – thanks to the intelligent electronics – looking up words and exploring the correct spelling and translation is much faster and cleverer.

Open the required dictionary directly by using one of the five dictionary keys and let's go!

- The word to look up is directly input via the easy-to-operate German QWERTZ keyboard. With each inserted character the selection is reduced by a filter search to quickly highlight the required word.
- The next menu item 'Wortverbindungen' explores idiomatic phrases and sample sentences in German, English and French and translates them correctly.
- The function key 'Sprung' directly accesses translations, cross-references, abbreviations,the French conjugation and additional notes such as the German spelling rules.
- The function keys 'My Words' and 'Verlauf' open the lists responding to the history of the displayed words to train special vocabulary or quickly recall certain words.
- 'Quick View' shows an overview of the different meanings of an entry word to enable direct access to the required definition.
- The intelligent word games 'Kreuzworträtsel lösen' and 'Anagramm lösen' lets you emerge not only as winner of word games, but will introduce some methodical variety into English or French lessons.
- The LCD offers a readable view for varying visibility and light conditions by supporting two font sizes and a backlight.

CONTENTS

Getting Started
- Using the PW-E420 for the first time 5
- Layout....8
- Basic Operation of PW-E420 10
- Set-up Menu (Menü-Einstellungen)....13
- Inputting Characters....14

Using Langenscheidt Englisch-Deutsch
- Looking up a word by Filter search 16
- Phrase search (Feststehende Wortverbindungen suchen) 17
- Spellcheck function (Rechtschreibprüfung)....17
- Word games (Buchstabenrätsel)....18
  - Crossword solver (Kreuzworträtsel lösen) 18
  - Anagram solver (Anagramm lösen) 19
- Further information....20

Using Langenscheidt Deutsch-Englisch
- Looking up a word by Filter search 21
- Phrase search (Feststehende Wortverbindungen suchen) 21
- Further information....21

Using Langenscheidt Französisch-Deutsch
- Looking up a word by Filter search 22
- The Conjugation of French Verbs....22
- Phrase search (Feststehende Wortverbindungen suchen) 23
- Spellcheck function (Rechtschreibprüfung)....24
- Word games (Buchstabenrätsel)....25
  - Crossword solver (Kreuzworträtsel lösen) 25
  - Anagram solver (Anagramm lösen) 25
- Further information....26

Using Langenscheidt Deutsch-Französisch
- Looking up a word by Filter search 27
- Phrase search (Feststehende Wortverbindungen suchen) 27
- Further information....27

Using Duden – Die deutsche Rechtschreibung
- Looking up a word by Filter search 28
- Spellcheck function (Rechtschreibprüfung)....29
- Word games (Buchstabenrätsel)....30
  - Crossword solver (Kreuzworträtsel lösen) 30
  - Anagram solver (Anagramm lösen) 30
- Duden-rules....31
- Further information....31

Zusatz-Infos (Contents-Info)
- In PW-E420 integrated information of the printed version of the dictionaries....32
- Further information are found in the appendix to this operation manual....32
- How to view the Zusatz-Infos 33

Using the Super jump function
- How to use the Super jump function 34

Using the My Words List function
- How to register a word in the My Words List....35
- Displaying the words you have registered in each dictionary....35

Using the History function
- How to use the History function 37

Using the Calculator function
- Prior to initiating calculations....39
- Calculation examples 39

Using the Converter function
- Currency converter (Währungsumrechner)....40
- Metric converter (Metrische Umrechnungen)....41

Appendices
- Replacing the battery 43
- Reset procedure if trouble occurs 44
- Specifications....44
- Troubleshooting....45
- Product suppor....45

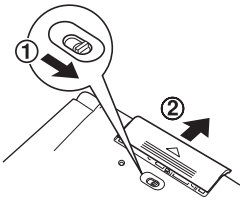
Further information of the dictionaries
- Langenscheidt Handwörterbuch Englisch....46
- Langenscheidt Handwörterbuch Französisch 46
- Duden – Die deutsche Rechtschreibung 46

Getting Started

Using the PW-E420 for the first time

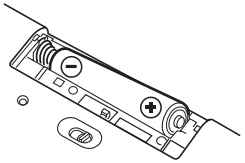
Be sure to perform the following operations before using the PW-E420 for the first time.

1. Set the battery replacement switch on the bottom of the unit to the 'REPLACE BATTERY' position.



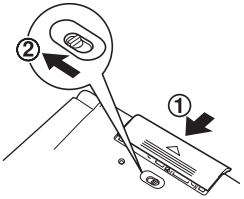
2. Remove the battery cover.

3. Insert the one battery. Make sure the battery polarity is correct.



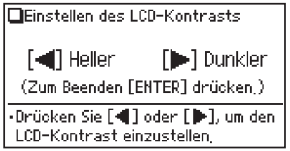
4. Replace the battery cover.

5. Set the battery replacement switch to the 'NORMAL OPERATION' position.



6. Open the unit and press (ON/OFF) to turn the power on.

   The LCD contrast screen will appear.


❑Einstellen des LCD-Kontrasts
[◀] Heller [▶] Dunkler
(Zum Beenden [ENTER] drücken.)
•Drücken Sie [◀] oder [▶], um den LCD-Kontrast einzustellen.

   - Should a different screen appear, follow the reset procedure on page 44.
   - If the power cannot be turned on:
     - Make sure the battery replacement switch is placed at the 'NORMAL OPERATION' position, then press (ON/OFF) again.
     - If the power still cannot be switched on, try following steps 1 through 6 in the above procedure again.

7. Adjust the LCD contrast by using (◀) (▶), and press (ENTER).

   The main menu screen will appear.

   - The LCD contrast setting can be adjusted later in the Set-up menu (Menü-Einstellungen).

Turning the power on/off

The power can be switched on by pressing the keys listed below.
To turn off the power, press [ON/OFF].

Key	Display status upon start-up
[ON/OFF]	Restores the display as it was before the unit was switched off (Resume function).
[MENU]	The main menu screen appears.
[EN-DE] [DE-EN] [FR-DE] [DE-FR] [Duden]	The display of each dictionary and/or function appears (Direct-on function).

Auto power off function

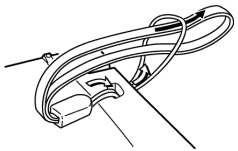
To save the battery, the PW-E420 will automatically turn its power off if no key operations are detected for a set period of time. The activation interval initial setting is 5 minutes, but it can be adjusted by following the directions on page 13.

To attach a commercially available strap

A carrying strap can be attached, as shown in the picture below (strap not included).

Caution:

- Do not swing the unit by the strap, or use excessive force to pull the strap. Doing so will cause a malfunction or hardware damage to the unit.



Back of the unit

Backlight

This product has a built-in backlight, which allows you to view the display and use the product even in low-light conditions. Pressing [☼] once illuminates the display until you have not pressed any keys for approx. 1 minute or press [☼] again.

Notes:

- Use the backlight in low-light conditions. It will drain power from the operating batteries and significantly reduce battery life.

Key notation used in this manual

- Keys are often assigned with more than one function. The appropriate key/function will be shown according to the input status.

  <Example 1>

  [Q] will be shown as either '[Q]', '[1]' or '1' depending on the input status.

  <Example 2>

  [G] will be shown as either '[G]' or '[+]' depending on the input status.

- The functions indicated with green typeface are second functions. Press and release [2nd], then press an appropriate key.

  <Example 1>

  [2nd] [ZURÜCK] directs to press and release [2nd], then press [ZURÜCK] ([∧]).

Data contained in the PW-E420

The dictionary data contained in this unit is based on the following dictionaries:

- Langenscheidt Handwörterbuch Englisch
  © Langenscheidt Handwörterbuch Englisch
  Langenscheidt KG, Berlin und München 2012
- Langenscheidt Handwörterbuch Französisch
  © Langenscheidt Handwörterbuch Französisch
  Langenscheidt KG, Berlin und München 2012
- Duden – Die deutsche Rechtschreibung
  © Duden – Die deutsche Rechtschreibung, 25. Aufl.
  2012 Bibliographisches Institut GmbH, Dudenstr. 6, 68167 Mannheim

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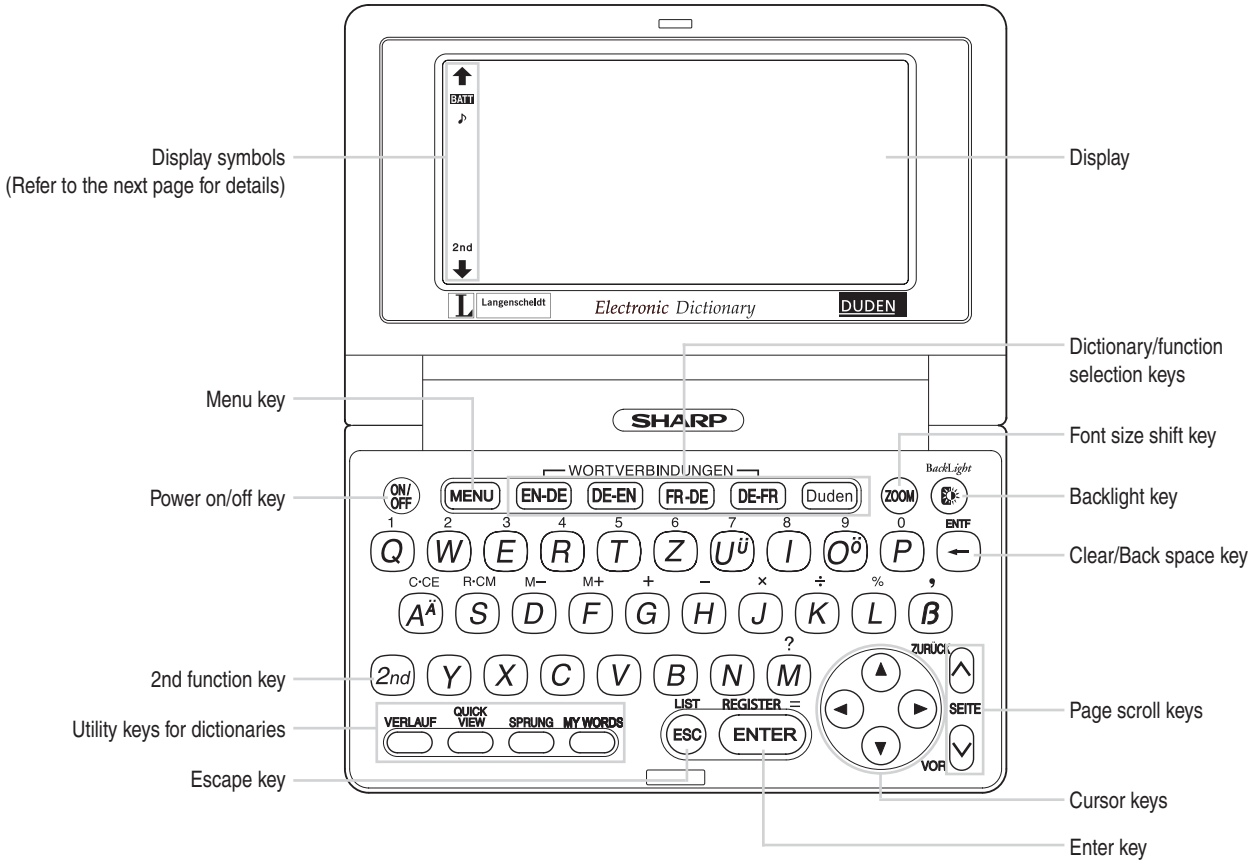
- The data content of each dictionary is mostly retained faithful to the original. However, some sections of the dictionary contents have had to be altered due to the limitations of the LCD display and for other reasons; these modifications have been implemented under the provisions of the publisher(s). In some rare cases, misspellings and/or mistypings may be found; these are 'errors' that have been retained unmodified from the source dictionaries.

Note:

- For information on the contents of the dictionaries, see 'Zusatz-Infos' in the menu of PW-E420 and on page 46–53 in this manual.
- Some prefatory material and some appendix data included in the printed book version of the dictionaries are not featured in this product.
- In this manual, the *Langenscheidt Handwörterbuch Englisch* is regarded and referred to as two separate dictionaries – the *'Langenscheidt Englisch-Deutsch'* and the *'Langenscheidt Deutsch-Englisch'*.

  Also the *Langenscheidt Handwörterbuch Französisch* is regarded and referred to as two separate dictionaries – the *'Langenscheidt Französisch-Deutsch'* and the *'Langenscheidt Deutsch-Französisch'*.

Layout


Display symbols
(Refer to the next page for details)
Display
Dictionary/function
selection keys
Menu key
Font size shift key
Power on/off key
Backlight key
Clear/Back space key
2nd function key
Utility keys for dictionaries
Escape key
Page scroll keys
Cursor keys
Enter key
BATT
2nd
Langenscheidt
Electronic Dictionary
DUDEN
SHARP
WORTVERBINDUNGEN
ON/OFF
MENU
EN-DE
DE-EN
FR-DE
DE-FR
Duden
ZOOM
Backlight
ENTF
C·CE
R·CM
M–
M+
ZURÜCK
SEITE
VOR
VERLAUF
QUICK VIEW
SPRUNG
MY WORDS
LIST
REGISTER
ESC
ENTER

Key assignments

(EN-DE) : Opens the initial screen for Langenscheidt Englisch-Deutsch

(DE-EN) : Opens the initial screen for Langenscheidt Deutsch-Englisch

(FR-DE) : Opens the initial screen for Langenscheidt Französisch-Deutsch

(DE-FR) : Opens the initial screen for Langenscheidt Deutsch-Französisch

(Duden) : Opens the initial screen for Duden – Die deutsche Rechtschreibung

VERLAUF : Opens the history list of each dictionary

QUICK VIEW : Opens a 'summarized' view, which only contains the most important paragraphs and senses of a headword

SPRUNG : Initiates a definition search of a term in a detail view of each dictionary

MY WORDS : Opens the 'MY WORDS' (My Words) list of each dictionary

(2nd) : 2nd function key
Activates the second function (printed in green on the above or left side of the keys) assigned to the next key pressed.

BackLight : Illuminates the display to view in low-light conditions

Display symbols

BATT This symbol will be displayed when the battery level is low. Promptly replace the old battery with a new one.

♪ Indicates that the key sound (beep) is set to ON.

2nd Indicates that (2nd) has been pressed.

These arrows suggest that more contents can be browsed by scrolling up/down the window.

(▲) (▼): Press to scroll up/down per text row.
(∧) (∨): Press to scroll up/down per visible window.
Scroll to the next/previous headword entry with (2nd) (VOR) and (2nd) (ZURÜCK).

Note:

- In this manual, symbols are not shown in the display examples.
- Certain symbols may appear on the display only when the LCD contrast is set to dark. Please ignore these symbols as they are not used by this product.

Operation guidance message

A brief guidance message may appear at the bottom of the screen to help you utilise functions more effectively.

Basic Operation of PW-E420

Inputting words for a dictionary search

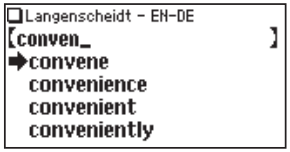
In this section, the basic search operation is described, the so-called filter search.

For details, refer to the manual chapter for each dictionary.

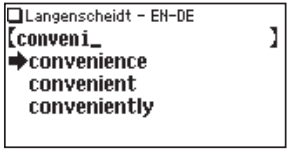
<Example>

Find translations of 'convenience' in Langenscheidt Englisch-Deutsch.

1. Press (EN-DE) to display the initial screen for Langenscheidt Englisch-Deutsch, then type 'conven'. The entries starting with 'conven' are listed.



2. Type 'i' to narrow down the list further. If the desired word is found, then you do not need to type any more letters.



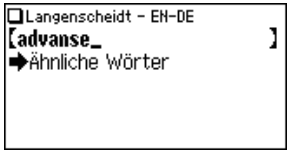
3. While the '➡' indication is visible on the left of 'convenience', press (ENTER).
   - Press (ESC) to return to the previous view.
   - Press (2nd) (LIST) to list the headwords in Langenscheidt Englisch-Deutsch.

Note:

- Refer to the section 'Inputting characters' on page 14.
- To learn different searching methods from those above, refer to the manual chapter for each dictionary.

If there is no match found

As you input the spelling of the desired word, the dictionary will narrow down the matching candidates. If the match is narrowed down to none (i. e. no word starting with the spelling is found in the dictionary), the message 'Ähnliche Wörter' appears.



In this case, press (ENTER) to list the dictionary entries alphabetically after the entered spelling.

Note about entering characters

While entering characters, exclude characters such as spaces, hyphens, apostrophes, slashes, commas, periods and brackets. See pages 14 and 15 for details.

Note:

- Up to 24 characters can be entered in the input field of the dictionary. When searching for words containing 25 characters or more, narrow down the search to select the words from the list manually.

Selecting a dictionary / function in the main menu

Press (MENU).

The main menu appears.

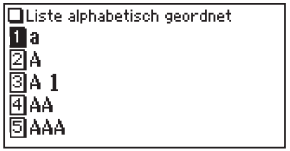
- Select an item by its index number using the number keys ((0) to (9)). The initial screen of the selected item appears.
- The desired item can also be selected by using the (▲) (▼) keys, followed by pressing the (ENTER) key.

Starting Auto Demo mode (Auto-Demo)

Activate the Auto demo for a guided tour through the key features of the product.

1. Press MENU 0 to start the Auto demo mode.
   - Press ESC or ENTER to end the Auto demo mode and return to the main menu.

List view: selecting an item; scrolling



Press EN-DE to display the initial screen of Langenscheidt Englisch-Deutsch, then press ENTER. The list view of *Langenscheidt Englisch-Deutsch* appears.

The List function helps to find a headword, in case that the exact spelling is unknown, because all dictionary entries before and after the input character sequence are displayed.

Using the Filter search, only those entries are displayed, which follow on the entered character sequence.

Selecting an item or a word

Use the corresponding number key to the index number on the left of each item, or use the ▲ or ▼ key to place the cursor on the desired item, followed by pressing the ENTER key.

Scrolling the view

'↑' and/or '↓' may appear on the left side of the screen, indicating that more information can be browsed by scrolling up/down the view.

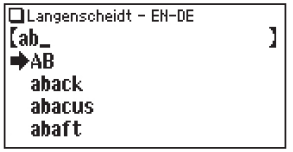
1) Press ▼ once to scroll down one text row. To scroll back one text row, press ▲ once.
2) Press V to scroll down a page. Press Λ to scroll the page up.

- Press and hold these keys to continuously scroll the lines/pages.

Filter search view: selecting an item; scrolling

Press EN-DE, then type A^A, and B.

'ab' is entered, and words starting from 'ab' listed.



Selecting each entry

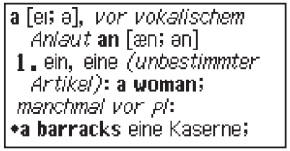
Use ▼ ▲ to place the cursor (indicated as '➡' on the left of the listed items) at the desired entry, then press ENTER. The detail view of the entry appears.

Scrolling the view

Refer to the section 'Scrolling the view' in the previous section, 'List view: selecting an item; scrolling'.

Detail view: scrolling

Press EN-DE, then type A^Ä, and ENTER.
The detail view with translations appears.



Browsing contents above/below the screen

'▲' and/or '▼' may appear on the left side of the screen, indicating that more information can be browsed by scrolling up/down the view.
Use ▼ ▲ or V Λ.

Scrolling up/down to the previous/next entry header

Press 2nd VOR to show the next entry header. To show the previous entry header, press 2nd ZURÜCK.

Other useful keys

ESC : Returns to the previous view

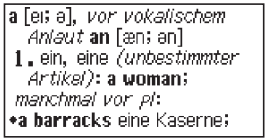
2nd ENTF: Shows the input screen of each dictionary or the initial display of a function

2nd LIST : Shows the list view starting from the previously displayed header

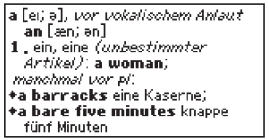
Shifting the displayed character size (ZOOM)

Press the ZOOM key to shift the character size to be displayed.

12 dot-based (vertical pixel resolution) or 9 dot-based characters can be selected. For instance, press ZOOM to display the 12 dot characters to 9 dot characters. Press ZOOM again to toggle back the displayed characters to 12 dot-base.



12 dot-based (default)


a [ei; ə], vor vokalischem Anlaut an [æn; ən]
1. ein, eine (unbestimmter Artikel): a woman;
manchmal vor pl:
•a barracks eine Kaserne;
•a bare five minutes knappe fünf Minuten

9 dot-based

- The character size setting will be retained until the next time ZOOM is pressed.
- The ZOOM key is functional in the following views:
  - The list view, detail view or filter search view or Quick view of each dictionary
  - The Super jump window
  - The list view and detail view of the Zusatz-Infos
  - The My Words List window
- The character size setting is saved for each dictionary in both the list view (including filter search view and Quick view) and the detail view.

Recalling the terms previously searched (VERLAUF)

The history of up to 30 items in each dictionary is automatically stored, and can be recalled easily by selecting the word in the history list. (For more information, see page 37.)

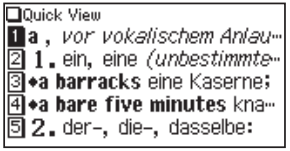
Listing a summary of detail view items (QUICK VIEW)

The Quick view function suppresses some examples and additional information, and lists out the main sections and senses from each detail view entry. Use this function to browse quickly through the summary of an entry.

<Example>

1. In the detail view shown on page 12, press QUICK VIEW.

   The Quick view screen appears.


Quick View
1 a , vor vokalischem Anlau…
2 1. ein, eine (unbestimmte…
3 ◆a barracks eine Kaserne;
4 ◆a bare five minutes kna…
5 2. der-, die-, dasselbe:

2. While the relevant sense or section is on the screen, select the desired item by the index number. The detail view of the selected sense/section appears.
   - Press QUICK VIEW in the Quick view to display the detail view.

Translating of words from a detail screen (SPRUNG)

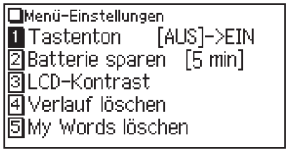
You can select words and Super Jump symbols (➡, ⬆, →) in the detail screen for search operations and explained or translated them. (For more information, see page 34.)

Register words you frequently use (MY WORDS)

With the function My Words List you can select words, which meaning you always forget or which you want to train specially for a vocabulary test. To register a new word, press 2nd REGISTER in the detail view. (For more information, see page 35.)

Set-up Menu (Menü-Einstellungen)

Press MENU to display the main menu, then press 9. The set-up menu appears.



Select a desired item to change the setting.

Note:

- To delete the history list, see page 37.
- To delete the My words list, see page 35.

Setting the key sound on/off (Tastenton)

The key sound (a short audible beep when a key is pressed) can be set to on or off.

1. Press MENU, 9, then 1, to toggle the key sound on or off.

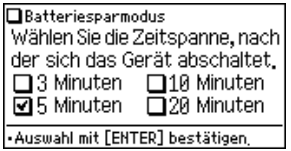
   A splash message appears to indicate the change of setting, then the main menu will be displayed.

Setting the Auto power off activation time (Batteriesparmodus)

This product automatically turns its power off to save the battery. The turn-off time is set to five minutes by default.

1. Press MENU, 9, then 2.

   The Auto power off setting screen appears.



2. Use the ▲, ▼, ◀ and ▶ keys to place the check mark on the desired duration, then press ENTER.

   The time will be set, then the main menu will be displayed.

Adjusting the LCD contrast (LCD-Kontrast)

Select this menu item to adjust the LCD contrast.

1. Press (MENU), (9), then (3).
2. To adjust the LCD contrast, use the (◀) (Lighter) key or (▶) (Darker) key, then press (ENTER) to return to the main menu.

Inputting Characters

Methods of inputting characters are described in this section.

Character entry

A simple example of inputting characters is shown below.

<Example>

Enter a word 'Gefäß' for search.

1. Press (DE-EN) to open the input screen of Langenscheidt Deutsch-Englisch.
2. Type 'Gefäß'.

   On the keyboard, press (G), (E), (F), (AÄ), then (ß).

Note:

- Up to 24 characters can be entered in the input field of the dictionary. When searching for words containing 25 characters or more, narrow down the search to select the words from the list manually.
- To enter accented or European characters, enter their unaccented or alphabetical equivalents as shown in the examples below. It should be noted that the search functions do not take account of accents or case.
  - 'ä', 'ö' and 'ü' -> enter 'a', 'o' and 'u' respectively.
  - 'é', 'à', 'û' and 'œ' -> enter 'e', 'a', 'u' and 'oe' respectively.
- Use the (ß) key to enter 'ß'. You can also press (S) (S) to search for 'ß'.
- While entering characters, exclude characters such as spaces, hyphens, apostrophes, slashes, commas, periods and brackets.

  <Example>

Word	Entry for search
car ferry	carferry
U-Bahn	ubahn
o'clock	oclock
c/o	co
ruck, zuck	ruckzuck
z. B.	zb
Autor(inn)en[*1]	autorinnen

[*1] To enter the masculine form of a word, let the letters away in parentheses.

- Convert uppercase letters to lowercase. This is also applicable to the capitalized first letter of a noun.

  <Example>

Word	Entry for search
USA	usa
DB	db
Ausweg	ausweg

- Spell out the numbers in each language when applicable.

  <Example>

Word	Entry for search
A1	aone
France 2	francedeux

- Enter 'a' instead of '@'.
- Enter 'tm' instead of '®'.
- Enter 'and' (in English) of '&'.
- Enter 'g' instead of '9'.
- Enter 'l' instead of '£'.
- Enter 'mf' or 'mikrofarad' instead of 'µF'.
- Enter 'theta' instead of 'θ'. About Greek letters, enter alphabet letters similarly.

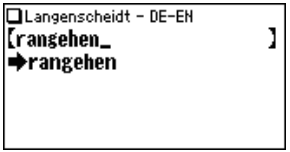
Modifying entry

Deleting unnecessary or incorrect characters

<Example>

Modify the entry 'rangehen' to indicate 'Ring'.

1. Press (DE-EN) to open the input screen of *Langenscheidt Deutsch-Englisch*.
2. Type 'rangehen'.



3. While the cursor is at the end of the string, press (←) four times to delete 'ehen'.
4. Next, press (◀) twice to move the cursor over the letter 'n'.

5. Press (←) once to delete a character on the left of cursor. 'a' will be deleted.

Adding characters

<Example>

6. In the above example, press (I) to insert a letter 'i' on the left of the cursor. The search will be narrowed with the word 'Ring'.

Note:

- Press (2nd) (ENTF) to delete all characters entered.

Using *Langenscheidt Englisch-Deutsch*

In this dictionary, German translations or equivalents of an English word can be found by entering its spelling. Features such as Phrase search, Spellcheck, Crossword solver and Anagram solver are also available.

Looking up a word by Filter search

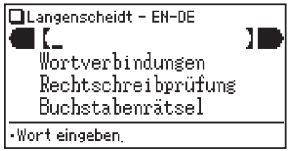
A translation of an English word can be looked up by inputting its spelling.

<Example>

Find the translation of 'advance'.

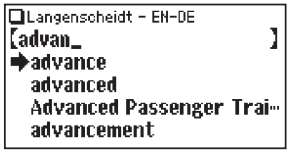
1. Press [EN-DE] to open *Langenscheidt Englisch-Deutsch*.

   The input screen appears.

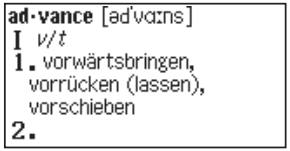


2. Type in the spelling of 'advance'.

   As you type, candidates for matching narrow. If the desired word is found, then there is no need to type any more letters.



3. Use [▼] and [▲] to move '➡' to point at the desired word, then press [ENTER]. The detail view of the word appears.
   - To browse contents on the next/previous page, press [▼] [▲] or [V] [Λ]. You may also find the Quick view function useful.



- To search for a word in the detail view, use the Super jump function.
- Press [ESC] to return to the previous screen.
- Press [2nd] [LIST] to list the headwords in *Langenscheidt Englisch-Deutsch*.
- To search for a different word, simply input a new spelling for the word, or press [2nd] [ENTF] or [EN-DE] to go to the dictionary's input screen.

Note about entering characters

While entering characters, exclude characters such as spaces, hyphens, apostrophes, slashes, commas, periods and brackets. See pages 14 and 15 for details.

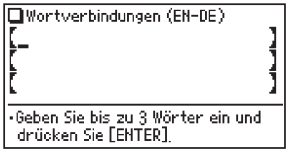
Phrase search (Feststehende Wortverbindungen suchen)

Using the Phrase search, you can translate phrases and idiomatic expressions as a native speaker. Input up to three words of the phrase, which should be translated, into the three input fields one below the other. The phrases containing ALL the entered words can be searched for.

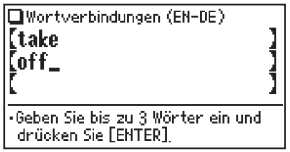
<Example>

Search for a phrase containing 'take' and 'off'.

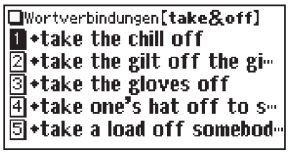
1. Press 2nd EN-DE.
   The input screen of the Phrase search appears.
   - It can also appear by pressing EN-DE ▼ ENTER.



2. Type 'take', press ▼, followed by 'off'.
   To input more than one word, input each word in the separate input field. Use the ▼ ▲ keys to move the cursor. Each input field can accommodate up to 24 characters.



3. Press ENTER.
   A list of phrases containing the words appears.


Wortverbindungen[take&off]
1 •take the chill off
2 •take the gilt off the gi…
3 •take the gloves off
4 •take one's hat off to s…
5 •take a load off somebod…

4. Select the desired index of the phrase using the number keys (press 1 in this example). The translation of the selected phrase is displayed.

   - Press ESC to return to the previous view.
   - Press 2nd LIST to list the index of phrases containing the words.
   - To search for a new phrase, simply begin inputting new words, or press 2nd ENTF to go back to the input screen to start a new search.

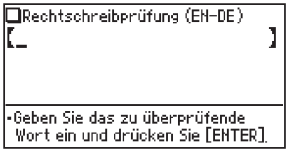
Spellcheck function (Rechtschreibprüfung)

The English spellcheck function can be helpful when the exact spelling of a query word is not known.

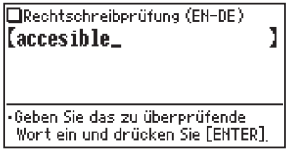
<Example>

You are not sure whether 'accesible' or 'accessible' is correct.

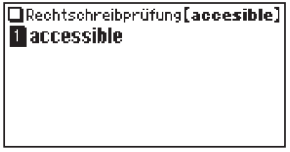
1. Press EN-DE, ▼, ▼, then ENTER, to open the input screen of the Spellcheck function.



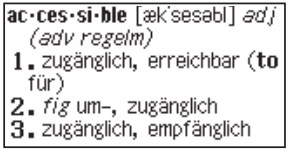
2. Type 'accesible'.



3. Press ENTER to initiate the spellcheck function.
   Words with similar spellings will be listed.
   - While 'Suche... Zum Beenden [ENTER] drücken.' is visible, press ENTER to stop the search. Note that if the search is interrupted, the list of possible results may not include all the closest matches.
   - If the word is typed with the correct spelling, it will appear at the top of the displayed list.



4. In the list, select a desired word using the number keys (press 1 in this example). The detail view of the word is displayed.



- Press [ESC] to return to the previous view.
- Press [2nd] [LIST] to list the headwords in *Langenscheidt Englisch-Deutsch*.

Note:

- Up to 100 words may be displayed in the list.

If the list of words does not appear as expected:

- Searching for words with particular spellings may take more time to complete than others.
- If no word is given, a message 'Nicht gefunden!' will momentarily be displayed, followed by the input screen of the spellcheck function. In this case you may wish to start the search again with a new spelling for the word.

Note:

- If you are not sure which is the correct spelling of a word, the place holder search with '?' in the menu 'Kreuzworträtsel lösen' will help. Refer to pages 18 and 19.
- There are only found words that are included as keywords in each dictionary.

Word games (Buchstabenrätsel)

With these functions you can train vocabulary with effortless ease, or become word game king. PW-E420 contains two word games.

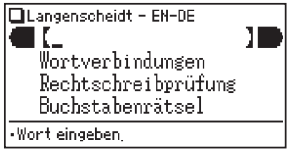
Crossword solver (Kreuzworträtsel lösen)

Use a wildcard character '?' to search for words with ambiguous spellings. Place the appropriate number of '?' characters in the places of characters yet to be determined. Press the '?' You can find a second function of the M button.

<Example>

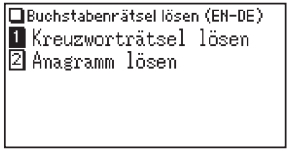
Find a matching word for a query '??ok'.

1. Press [EN-DE] to open Langenscheidt Englisch-Deutsch.

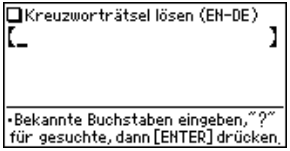


2. Press [▼] three times to place the cursor at the 'Buchstabenrätsel', then press [ENTER].

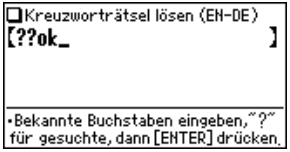
   The solver menu appears.



3. Press [1] . The Crossword solver's input screen appears.



4. Type '??ok' into the input field. Press [2nd] [?] twice to enter '??'. (note: press [2nd] and [?] keys successively, not at the same time!)

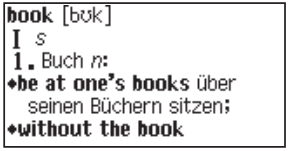


5. Press ENTER to start the search.

   A list of the wildcard matches appear. Up to 100 words may be displayed in the list.

6. In the list, select a desired word using the number keys (press 3 in this example).

   The detail view of the selected word appears.



   - Press ESC to return to the previous view.
   - Press 2nd LIST to list the headwords in *Langenscheidt Englisch-Deutsch*.
   - To initiate another search, simply type in the new spelling or press 2nd ENTF to return to the input screen of the Crossword solver.

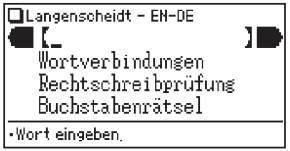
Anagram solver (Anagramm lösen)

You can input a word or a sequence of characters to search for identical anagrams in the dictionary *Langenscheidt English-German*. An anagram is a word game, which creates meaningful, new words by re-arranging the sequence of characters.

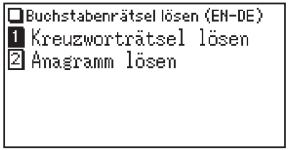
<Example>

Find anagrams for 'dear'.

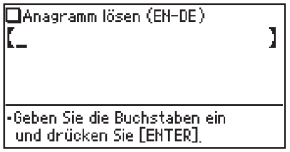
1. Press EN-DE to open Langenscheidt Englisch-Deutsch.



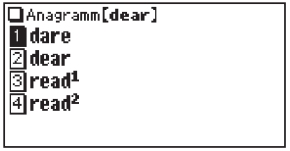
2. Press the ▼ three times to place the cursor at the 'Buchstabenrätsel', then press ENTER. The solver menu appears.



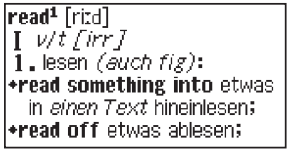
3. Press 2 . The input screen of the Anagram solver appears.



4. Place 'dear' in the input field, then press ENTER to initiate the search. Up to 100 words may be displayed in the list.



5. In the list of matches, use the number keys to select a word (press 3 in this example).



   The detail view of the selected word appears.

   - Press ESC to return to the previous view.
   - Press 2nd LIST to list the headwords in *Langenscheidt Englisch-Deutsch*.
   - To initiate another search, simply type in the new spelling or press 2nd ENTF to return to the input screen of the Anagram solver.

Further information

- For further information about this dictionary, refer to the section 'Viewing the Zusatz-Infos' (page 32) and page 46.

Using *Langenscheidt Deutsch-Englisch*

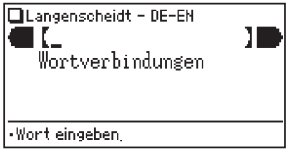
In this dictionary, English translations or equivalents of a German word can be found by entering its spelling, with a Phrase search feature also available.

Looking up a word by Filter search

A translation of a German word can be looked up by inputting its spelling.

<Example>

Find the translation of 'geben'.



1. Press (DE-EN) to open *Langenscheidt Deutsch-Englisch*.

   The spelling input screen appears.

2. Type 'geben'.

   As you type, candidates for matching narrow. If the desired word is found, then there is no need to type any more letters.

3. While '➡' appears on the left of 'geben', press (ENTER).
   The detail view of the word appears.
   - To browse contents on the next/previous page, press (▼) (▲) or (V) (Λ). You may also find the Quick view function useful.
   - To search for a word in the detail view, use the Super jump function.
   - Press (ESC) to return to the previous screen.
   - Press (2nd) (LIST) to list the headwords in *Langenscheidt Deutsch-Englisch*.
   - To search for a different word, simply begin inputting a new word, or press (2nd) (ENTF) or (DE-EN) to go to the dictionary's input screen.

Note about entering characters

While entering characters, exclude characters such as spaces, hyphens, apostrophes, slashes, commas, periods and brackets. See pages 14 and 15 for details.

Phrase search (Feststehende Wortverbindungen suchen)

Using the Phrase search, you can translate phrases and idiomatic expressions as a native speaker.

Input up to three words of the phrase, which should be translated, into the three input fields one below the other. The phrases containing ALL the entered words can be searched for.

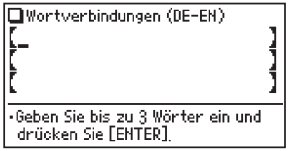
<Example>

Search for a phrase containing 'Herz' and 'haben'.

1. Press (2nd) (DE-EN).

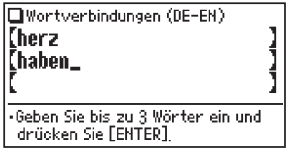
   The input screen of the Phrase search appears.

   - It can also appear by pressing (DE-EN) (▼) (ENTER).



2. Type 'Herz', press (▼), followed by 'haben'.

   To input more than one word, input each word in the separate input field. Use the (▼) (▲) keys to move the cursor. Each input field can accommodate up to 24 characters.



3. Press (ENTER).

   A list of phrases containing the words appears.

4. Select the desired index of the phrase using the number keys. The translation of the selected phrase is displayed.
   - Press (ESC) to return to the previous view.
   - Press (2nd) (LIST) to list the index of phrases containing the words.
   - To search for a new phrase, simply begin inputting new words, or press (2nd) (ENTF) to go back to the input screen to start a new search.

Further information

- For further information about this dictionary, refer to the section 'Viewing the Zusatz-Infos' (page 32) and page 46.

Using *Langenscheidt Französisch-Deutsch*

In this dictionary, German translations or equivalents of a French word can be found by entering its spelling. Features such as Phrase search, Spellcheck, Crossword solver and Anagram solver are also available.

Looking up a word by Filter search

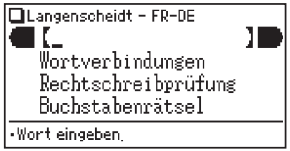
A translation of a French word can be looked up by inputting its spelling.

<Example>

Find the translation of 'voir'.

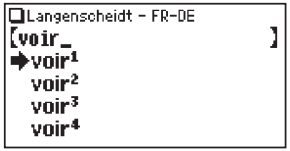
1. Press [FR-DE] to open *Langenscheidt Französisch-Deutsch*.

   The input screen appears.

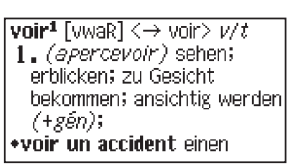


2. Type in the spelling of 'voir'.

   As you type, candidates for matching narrow. If the desired word is found, then there is no need to type any more letters.



3. Use [▼] and [▲] to move '➡' to point at the desired word, then press [ENTER]. The detail view of the word appears.
   - To browse contents on the next/previous page, press [▼] [▲] or [V] [Λ]. You may also find the Quick view function useful.



   - To search for a word in the detail view, use the Super jump function.
   - Press [ESC] to return to the previous screen.
   - Press [2nd] [LIST] to list the headwords in Langenscheidt Französisch-Deutsch.
   - To search for a different word, simply input a new spelling for the word, or press [2nd] [ENTF] or [FR-DE] to go to the dictionary's input screen.

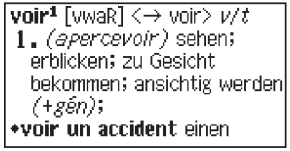
Note about entering characters

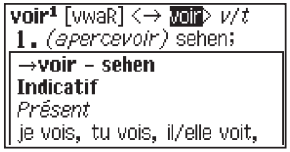
While entering characters, exclude characters such as spaces, hyphens, apostrophes, slashes, commas, periods and brackets. See pages 14 and 15 for details.

The Conjugation of French Verbs

With irregular French verbs, the verb paradigm is linked to the entry (headword) by a →.

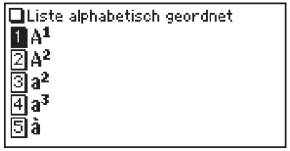
- Use the 'Jump' function to call up the verb paradigms (Press [SPRUNG] and point at the reference of the verb paradigm behind the arrow, then press [ENTER]).
- The corresponding conjugation is displayed.
- Press [ESC] to exit the verb paradigm and return to the keyword entry.





Proceed as follows to call up all conjugations of French verbs as a list:

1. Press [FR-DE] to open the input screen and then press [ENTER] (without previously entering text).



2. Press (∧) to show the last entry of all FR-DE entries.
   - The list of French conjugations is shown in alphabetical order.

Note:

- The last page of the verb paradigms is displayed. The verb paradigms are indicated by a pointing arrow ⟶ to differentiate them from the entries (headwords) themselves.

3. Scroll through the conjugation list using (▲) and (▼).
4. Open the desired conjugation by entering the number or selecting a conjugation with the (▲) and (▼) keys and pressing (ENTER).
5. Move to the next or previous conjugation with (2nd) and (ZURÜCK) or (2nd) and (VOR). Press (ESC) to return to the conjugation list.

Note:

- The verb paradigms cannot be directly called up on the input screen.

Phrase search (Feststehende Wortverbindungen suchen)

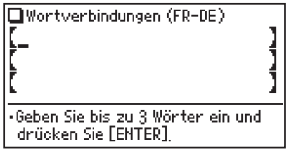
Using the Phrase search, you can translate phrases and idiomatic expressions as a native speaker. Input up to three words of the phrase, which should be translated, into the three input fields one below the other. The phrases containing ALL the entered words can be searched for.

<Example>

Search for a phrase containing 'poire' and 'soif'.

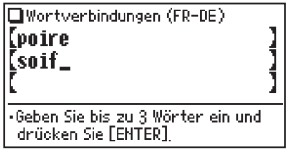
1. Press (2nd) (FR-DE).

   The input screen of the Phrase search appears.
   - It can also appear by pressing (FR-DE) (▼) (ENTER).



2. Type 'poire', press (▼), followed by 'soif'.

   To input more than one word, input each word in the separate input field. Use the (▼) (▲) keys to move the cursor. Each input field can accommodate up to 24 characters.



3. Press (ENTER).

   A list of phrases containing the words appears.
4. Select the desired index of the phrase using the number keys. The translation of the selected phrase is displayed.
   - Press (ESC) to return to the previous view.
   - Press (2nd) (LIST) to list the index of phrases containing the words.
   - To search for a new phrase, simply begin inputting new words, or press (2nd) (ENTF) to go back to the input screen to start a new search.

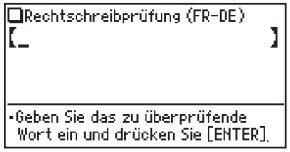
Spellcheck function (Rechtschreibprüfung)

The French spellcheck function can be helpful when the exact spelling of a query word is not known.

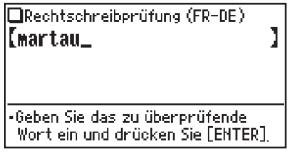
<Example>

You are not sure whether 'martau' or 'marteau' is correct.

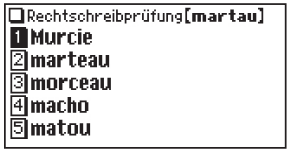
1. Press (FR-DE), (▼), (▼), then (ENTER), to open the input screen of the Spellcheck function.



2. Type 'martau'.



3. Press (ENTER) to initiate the spellcheck function.



   Words with similar spellings will be listed.

   - While 'Suche... Zum Beenden [ENTER] drücken.' is visible, press (ENTER) to stop the search. Note that if the search is interrupted, the list of possible results may not include all the closest matches.
   - If the word is typed with the correct spelling, it will appear at the top of the displayed list.

4. In the list, select a desired word using the number keys. The detail view of the word is displayed.
   - Press (ESC) to return to the previous view.
   - Press (2nd) (LIST) to list the headwords in Langenscheidt Französisch-Deutsch.

Note:

- Up to 100 words may be displayed in the list.

If the list of words does not appear as expected:

- Searching for words with particular spellings may take more time to complete than others.
- If no word is given, a message 'Nicht gefunden!' will momentarily be displayed, followed by the input screen of the spellcheck function. In this case you may wish to start the search again with a new spelling for the word.

Note:

- If you are not sure which is the correct spelling of a word, the place holder search with '?' in the menu 'Kreuzworträtsel lösen' will help. Refer to page 25.
- It is found only words that are included as keywords in each dictionary.

Word games (Buchstabenrätsel)

With these functions you can train vocabulary with effortless ease, or become word game king. PW-E420 contains two word games.

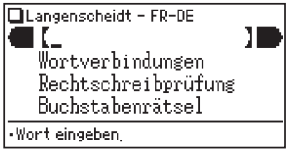
Crossword solver (Kreuzworträtsel lösen)

Use a wildcard character '?' to search for words with ambiguous spellings. Place the appropriate number of '?' characters in the places of characters yet to be determined. Press the '?' You can find a second function of the M button.

<Example>

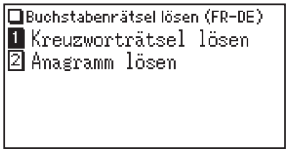
Find a matching word for a query 'li?re'.

1. Press (FR-DE) to open *Langenscheidt Französisch-Deutsch*.

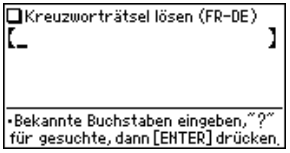


2. Press (▼) three times to place the cursor at the 'Buchstabenrätsel', then press (ENTER).

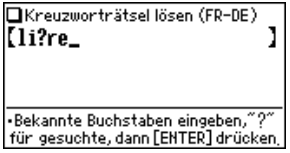
   The solver menu appears.



3. Press (1). The Crossword solver's input screen appears.

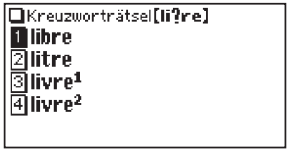


4. Type 'li?re' into the input field. Press (2nd) (?) once to enter '?'.



5. Press (ENTER) to start the search.

   A list of the wildcard matches appear. Up to 100 words may be displayed in the list.



6. In the list, select a desired word using the number keys.
   The detail view of the selected word appears.
   - Press (ESC) to return to the previous view.
   - Press (2nd) (LIST) to list the headwords in *Langenscheidt Französisch-Deutsch*.
   - To initiate another search, simply type in the new spelling or press (2nd) (ENTF) to return to the input screen of the Crossword solver.

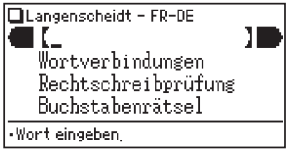
Anagram solver (Anagramm lösen)

A word or series of letters can be entered to find any matching anagrams found in *Langenscheidt Französisch-Deutsch*. An anagram is a word game, which creates meaningful, new words by re-arranging the sequence of characters.

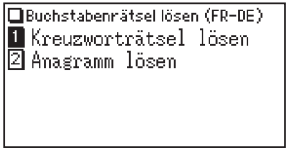
<Example>

Find anagrams for 'gourde'.

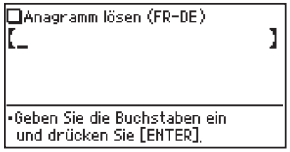
1. Press (FR-DE) to open *Langenscheidt Französisch-Deutsch*.



2. Press the (▼) three times to place the cursor at the 'Buchstabenrätsel', then press (ENTER). The solver menu appears.



3. Press (2) . The input screen of the Anagram solver appears.



4. Place 'gourde' in the input field, then press (ENTER) to initiate the search. Up to 100 words may be displayed in the list.

5. In the list of matches, use the number keys to select a word.

   The detail view of the selected word appears.

   - Press (ESC) to return to the previous view.
   - Press (2nd) (LIST) to list the headwords in Langenscheidt Französisch-Deutsch.
   - To initiate another search, simply type in the new spelling or press (2nd) (ENTF) to return to the input screen of the Anagram solver.

Further information

- For further information about this dictionary, refer to the section 'Viewing the Zusatz-Infos' (page 32) and pages 46.

Using *Langenscheidt Deutsch-Französisch*

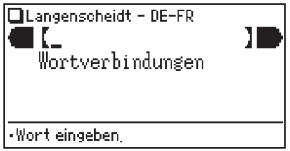
In this dictionary, French translations or equivalents of a German word can be found by entering its spelling, with a Phrase search feature also available.

Looking up a word by Filter search

A translation of a German word can be looked up by inputting its spelling.

<Example>

Find the translation of 'geben'.



1. Press DE-FR to open *Langenscheidt Deutsch-Französisch*.

   The spelling input screen appears.

2. Type 'geben'.

   As you type, candidates for matching narrow. If the desired word is found, then there is no need to type any more letters.

3. While '➡' appears on the left of 'geben', press ENTER.
   The detail view of the word appears.

   - To browse contents on the next/previous page, press ▼ ▲ or ∨ ∧. You may also find the Quick view function useful.
   - To search for a word in the detail view, use the Super jump function.
   - Press ESC to return to the previous screen.
   - Press 2nd LIST to list the headwords in *Langenscheidt Deutsch-Französisch*.
   - To search for a different word, simply begin inputting a new word, or press 2nd ENTF or DE-FR to go to the dictionary's input screen.

Note about entering characters

While entering characters, exclude characters such as spaces, hyphens, apostrophes, slashes, commas, periods and brackets. See pages 14 and 15 for details.

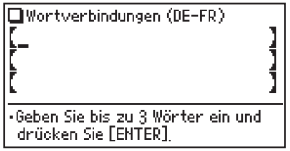
Phrase search (Feststehende Wortverbindungen suchen)

Using the Phrase search, you can translate phrases and idiomatic expressions as a native speaker.

Input up to three words of the phrase, which should be translated, into the three input fields one below the other. The phrases containing ALL the entered words can be searched for.

<Example>

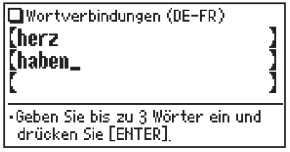
Search for a phrase containing 'Herz' and 'haben'.



1. Press 2nd DE-FR.

   The input screen of the Phrase search appears.

   - It can also appear by pressing DE-FR ▼ ENTER.



2. Type 'Herz', press ▼, followed by 'haben'.

   To input more than one word, input each word in the separate input field. Use the ▼ ▲ keys to move the cursor. Each input field can accommodate up to 24 characters.

3. Press ENTER.

   A list of phrases containing the words appears.

4. Select the desired index of the phrase using the number keys. The translation of the selected phrase is displayed.

   - Press ESC to return to the previous view.
   - Press 2nd LIST to list the index of phrases containing the words.
   - To search for a new phrase, simply begin inputting new words, or press 2nd ENTF to go back to the input screen to start a new search.

Further information

- For further information about this dictionary, refer to the section 'Viewing the Zusatz-Infos' (page 32) and pages 46.

Using *Duden – Die deutsche Rechtschreibung*

This dictionary is the standard for German spelling based on the new, official regulations, to look up the obligatory spelling of words, division of words and regulations. In addition, the functions 'Rechtschreibprüfung', 'Kreuzworträtsel lösen', 'Anagramm lösen' and 'Duden-Regeln', which are the rules for the German spelling and punctuation, are available in this menu.

Looking up a word by Filter search

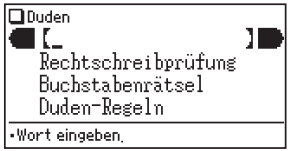
A definition of a word can be looked up by inputting its spelling.

<Example>

Find the information for 'gelb'.

1. Press [Duden] to open *Duden – Die deutsche Rechtschreibung*.

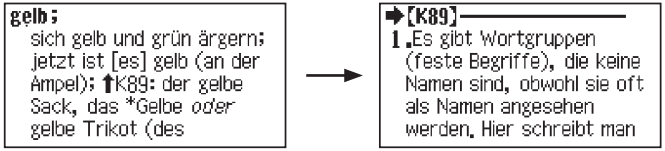
   The input screen appears.



2. Type in the spelling of 'gelb'.

   As you type, candidates for matching narrow. If the desired word is found, then there is no need to type any more letters.

3. Use [▲] and [▼] to move '➡' to point at the desired word, then press [ENTER]. The detail view of the word appears.
   - To browse contents on the next/previous page, press [▼] [▲] or [V] [Λ]. You may also find the Quick view function useful.
   - If a word selected is a close derivative of a headword, it may not have its own definitions. In these cases, it is helpful to scroll up within the detail view to find the definitions of the headword itself.
   - Use the Super Jump fnction to mark a word in a detail screen and explain/translate it, or to open the regulations of the German spelling, which are displayed with ⬆. For more information on the Duden rules can be found on page 31.



If there are multiple correct spellings for a word, the recommendation of the Duden marked with an asterisk *.

   - Press [ESC] to return to the previous screen.
   - Press [2nd] [LIST] to list the headwords in *Duden – Die deutsche Rechtschreibung*.
   - To search for a different word, simply input a new spelling for the word, or press [2nd] [ENTF] or [Duden] to go to the dictionary's input screen.

Note about entering characters

While entering characters, exclude characters such as spaces, hyphens, apostrophes, slashes, commas, periods and brackets. See pages 14 and 15 for details.

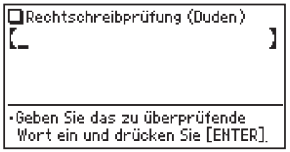
Spellcheck function (Rechtschreibprüfung)

The German spellcheck function can be helpful when the exact spelling of a query word is not known.

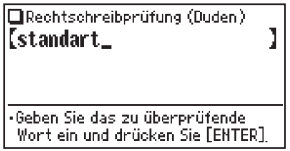
<Example>

You are not sure whether 'Standart' or 'Standard' is correct.

1. Press (Duden), (▼), then (ENTER), to open the input screen of the spellcheck function.

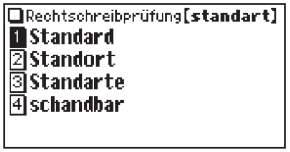


2. Enter 'Standart'.



3. Press (ENTER) to initiate the spellcheck function.

   Words with similar spellings will be listed.



   - While 'Suche... Zum Beenden [ENTER] drücken.' is visible, press (ENTER) to stop the search. Note that if the search is interrupted, the list of possible results may not include all the closest matches.
   - If the word is typed with the correct spelling, it will appear at the top of the displayed list.

4. In the list, select a desired word using the number keys.
   The detail view of the word is displayed.
   - Press (ESC) to return to the previous view.
   - Press (2nd) (LIST) to list the headwords in *Duden – Die deutsche Rechtschreibung*.

Note:

- Up to 100 words may be displayed in the list.

If the list of words do not appear as expected:

- Searching for words with particular spellings may take more time to complete than others.
- If no word is given, a message 'Nicht gefunden!' will momentarily be displayed, followed by the input screen of the spellcheck function. In this case you may wish to start the search again with a new spelling for the word.

Note:

- If you are not sure which is the correct spelling of a word, the place holder search with '?' in the menu 'Kreuzworträtsel lösen' will help. Refer to page 30.

Word games (Buchstabenrätsel)

With these functions you can train vocabulary with effortless ease, or become word game king. PW-E420 contains two word games.

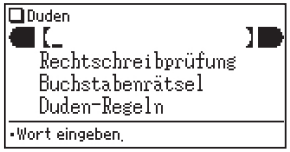
Crossword solver (Kreuzworträtsel lösen)

Use a wildcard character '?' to search for words with ambiguous spellings. Place the appropriate number of '?' characters in the places of characters yet to be determined. Press the '?' You can find a second function of the M button.

<Example>

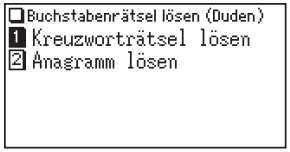
Find a matching word for a query 'w?rt'.

1. Press (Duden) to open *Duden – Die deutsche Rechtschreibung*.

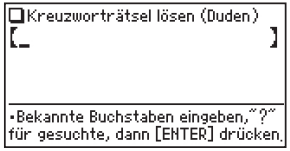


2. Press (▼) twice to place the cursor at the 'Buchstabenrätsel', then press (ENTER).

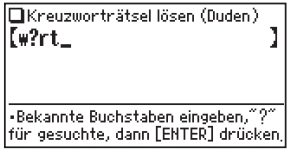
   The solver menu appears.



3. Press (1) . The Crossword solver's input screen appears.



4. Type 'w?rt' into the input field. Press (2nd) (?) once to enter '?'.



5. Press (ENTER) to start the search.

   A list of the wildcard matches appear. Up to 100 words may be displayed in the list.

6. In the list, select a desired word using the number keys.

   The detail view of the selected word appears.

   - Press (ESC) to return to the previous view.
   - Press (2nd) (LIST) to list the headwords in *Duden – Die deutsche Rechtschreibung*.
   - To initiate another search, simply type in the new spelling or press (2nd) (ENTF) to return to the input screen of the Crossword solver.
   - To search for 'ß' character in the Crossword solver, enter '?' twice. (e.g. for searching 'groß', type 'gro??'.)

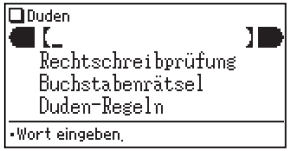
Anagram solver (Anagramm lösen)

A word or series of letters can be entered to find any matching anagrams found in *Duden – Die deutsche Rechtschreibung*. An anagram is a word game, which creates meaningful, new words by re-arranging the sequence of characters.

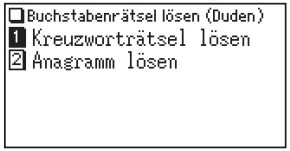
<Example>

Find anagrams for 'Lauf'.

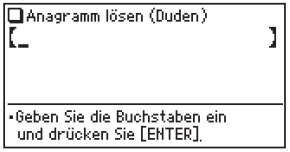
1. Press (Duden) to open *Duden – Die deutsche Rechtschreibung*.



2. Press (▼) twice to place the cursor at the 'Buchstabenrätsel', then press (ENTER). The solver menu appears.



3. Press (2) . The input screen of the Anagram solver appears.



4. Place 'Lauf' in the input field, then press (ENTER) to initiate the search. Up to 100 words may be displayed in the list.
5. In the list of matches, use the number keys to select a word.

   The detail view of the selected word appears.

   - Press (ESC) to return to the previous view.
   - Press (2nd) (LIST) to list the headwords in *Duden – Die deutsche Rechtschreibung*.
   - To initiate another search, simply type in the new spelling or press (2nd) (ENTF) to return to the input screen of the Anagram solver.

Duden-rules

The complete list of the k-rules of the German spelling can be accessed in the device as follows:

1. Press (Duden) to open *Duden - Die deutsche Rechtschreibung*.

   The input screen appears.
2. Press (▼) three times to place the cursor at the 'Duden-Regeln', then press (ENTER).

3. Use the number keys to select the desired information in the list.

Note:

- To browse contents on the next/previous page, press (▼) (▲) or (V) (Λ). You may also find the Quick view function useful.
- Press (ESC) to return to the previous view.

Further information

For further information about this dictionary, refer to the section 'Viewing the Zusatz-Infos' (page 32) and pages 46–53.

Zusatz-Infos (Contents-Info)

In the Zusatz-Infos you find information, which are located in the front resp. back part of the related printed book versions.

In PW-E420 integrated information of the printed version of the dictionaries

- For Langenscheidt Handwörterbuch Englisch:
  a. Copyright (EN-DE/DE-EN)
  b. Hinweise für die Benutzer Stichwörter, Übersetzungen und Wendungen
  c. Die Aussprache des Englischen
  d. Zahlen
  e. Britische und amerikanische Maße und Gewichte
  f. Unregelmäßige Verben
- For Langenscheidt Handwörterbuch Französisch:
  a. Copyright (FR-DE/DE-FR)
  b. Hinweise für die Benutzer
  c. Die Aussprache des Französischen
  d. Zahlen
  e. Silbentrennung im Französischen
  f. Großschreibung im Französischen
  g. Zeichensetzung im Französischen
  h. Empfohlene neue Schreibweisen im Französischen
  i. Die französischen Departements
- For Duden – Die deutsche Rechtschreibung:
  a. Copyright (Duden)
  b. Zur Wörterbuchbenutzung
  c. Im Wörterverzeichnis verwendete Abkürzungen
  d. Wichtige grammatische Fachausdrücke
  e. Wörter/Unwörter des Jahres

Further information are found in the appendix to this operation manual

- For Langenscheidt Handwörterbuch Englisch:
  a. Copyright
- For Langenscheidt Handwörterbuch Französisch:
  a. Copyright
- For Duden – Die deutsche Rechtschreibung:
  a. Sprache in Zahlen

How to view the Zusatz-Infos

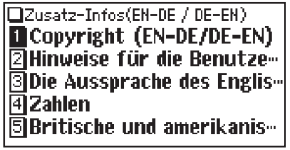
<Example>

View 'Hinweise für die Benutzung des Wörterbuchs' in *Langenscheidt Handwörterbuch Englisch*.

1. Press (MENU), (6) to open the Zusatz-Infos.

2. Press (1) to select 'EN-DE/DE-EN'.

   The list of Zusatz-Infos in the selected dictionary will be displayed.



3. Use the number keys to select the desired information in the list.

Note:

- To browse contents on the next/previous page, press (▼) (▲) or (V) (Λ). You may also find the Quick view function useful.
- Truncated words in the category title/subtitle list are indicated with a trailing '…' at the end.
- Press (ESC) to return to the previous view.

Using the Super jump function

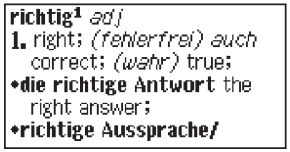
The Super Jump function links the dictionaries integrated in PW-E420, so that words from a detail screen can be quickly marked and explained resp. translated.

Use the Super jump function to select any word in the detail view of each dictionary, then initiate a search based on the selected word.

How to use the Super jump function

<Example>

Initiate a Super jump search via *Langenscheidt Deutsch-Englisch*.



1. In *Langenscheidt Deutsch-Englisch*, show the detail view of the word 'richtig'.
2. Press SPRUNG. The cursor appears to select the first word in the view.

3. Use the ▼ ▲ ▶ ◀ keys to move the cursor (and its selection of word) to a desired word (select 'Antwort' in this example).
   - The pressing of SPRUNG also moves the cursor.
   - The symbols (➡, ⬆, ⟶) are also jumping icons.

Note:

- ➡ will open a reference to the displayed word.
- With ⬆ the Duden rules are open.
- With ⟶, the conjugation of French verbs appear.
- Abbreviations in dictionary in English and French are indicated by the JUMP function.

4. While the desired word is selected, press ENTER.

   The Super jump window appears to display selectable items.
   - A list of matching words is displayed. If no match is found, then a list of up to 30 closely spelled words per dictionary will be searched and displayed. If the search returns zero results, a message 'Nicht gefunden!' appears momentarily.
   - A variant or inflected form of a headword, or a partial segment of a component verb may not be initiated for a Super jump search.
   - Press EN-DE, DE-EN, FR-DE, DE-FR or Duden instead of pressing ENTER, to specify the dictionary to jump to.
   - If only one match is found or the jump icon (➡, ⬆, ⟶) item is selected, then the description of the item will be displayed in the Super jump window instead.
5. Use the number keys to select a desired word in the list (press 1 in this example).

   The translations or definitions of the selected word are displayed in the Super jump window.

   - Press ESC to return to the previous view.
   - When '⬆' and/or '⬇' appears on the left side of the window, ▼ ▲ or ∨ ∧ can be used to scroll the window.
6. Press ENTER to jump to the translations or definitions of the selected word.

   The detail view of the selected word appears.

   - Press ESC to display the previous view.

About the detail view after the Jump

- In case that behind the word marked with ➡ follows a reference number, e.g. 3a, it refers to the direct reference within the headword. I.e. you will find the correct reference, if you look up the input of 3a of the structure of the headword.
- The behaviour and function of the detail view is the same as the detail view after an ordinary search.
- Press 2nd ENTF at the detail view to go back to the dictionary's input screen.
- A chain of multiple Super jump actions can be backtracked up to 10 times by pressing the ESC key.

Using the My Words List function

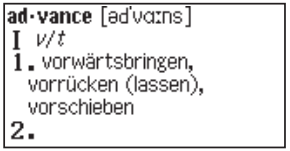
The function 'My Words' is specially useful to train vocabulary. Use the function 'My Words (Meine Wörter)' list to register a word, which has been selected from one of the dictionaries before. You can select up to 30 entries for each dictionary word list. Only words can be registered, which are headword entries. I.e. words, which are not contained in the dictionary, cannot be added, because the data base is closed.

How to register a word in the My Words List

<Example>

Register 'advance' in Langenscheidt Englisch-Deutsch in the My Words List.

1. In *Langenscheidt Englisch-Deutsch*, show the detail view of the word 'advance'.



2. Press (2nd) (REGISTER) to register the word 'advance'.

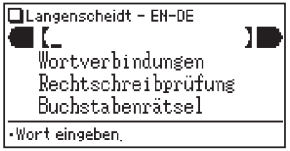
   A message 'Eingetragen!' will momentarily be displayed.

Displaying the words you have registered in each dictionary

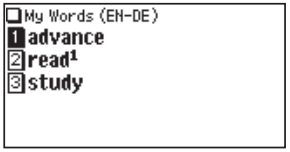
<Example>

Display the words registered in *Langenscheidt Englisch-Deutsch*.

1. Press (EN-DE) to open the initial screen of the *Langenscheidt Englisch-Deutsch*.



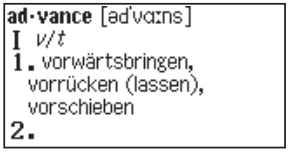
2. Press (MY WORDS). The My Words List of the *Langenscheidt Englisch-Deutsch* appears.



   - The My Word List can be displayed by pressing (MY WORDS) at the initial screen, list view and detail view of each dictionary.
   - Phrases in each dictionary cannot be registered in the My Words List.
   - The My Words List is in alphabetical order.
   - Truncated words in the list are indicated with a trailing '…'.

3. Use the number keys to select the desired word in the list (press (1) in this example).

   The detail view of the selected word appears.



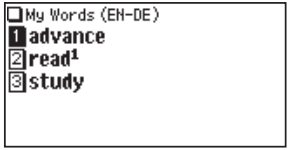
   - Press (ESC) to return to the previous view.

Note:

- The My Words List cannot be accessed from the Zusatz-Infos.

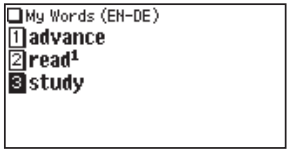
Deleting a My Words List item

1. Display the My Words List on the screen.

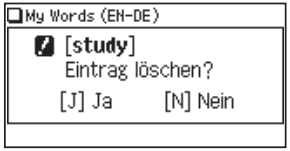


2. Use the ▼ or ▲ key to place the cursor on the item to be deleted (select 'study' in this example).

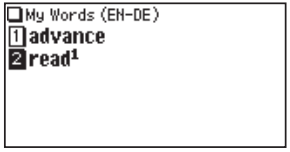
   The reverse colour indicates the selected item.



3. Press ←. A confirmation dialogue for deletion appears.

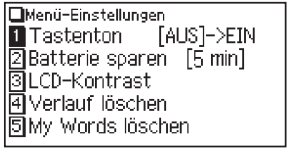


4. Press J. The selected item is deleted.

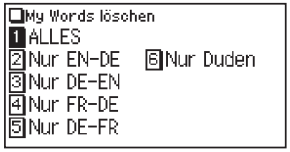


Deleting the My Words List of a dictionary

1. Press MENU, then 9 to open the Set-up menu.



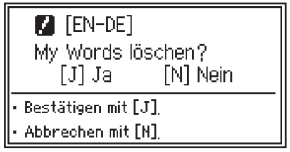
2. Press 5 to select 'My Words Löschen'.



3. Use the number keys to select the My Words List you wish to delete (press 2 in this example).

   A confirmation dialogue for deletion appears.

   - To delete all My Words Lists, select 'ALLES'.



4. Press J. The selected My Words List is deleted and the main menu appears.

Using the History function

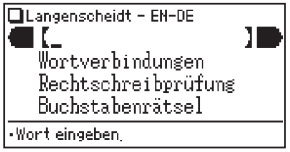
Use the History function to recall a headword or idioms/sentences previously searched in the dictionaries.

How to use the History function

<Example>

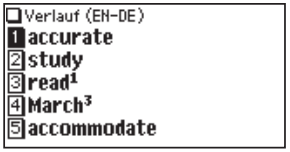
Recall the search history in Langenscheidt Englisch-Deutsch.

1. Press (EN-DE) to open *Langenscheidt Englisch-Deutsch*.



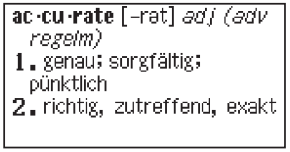
2. Press (VERLAUF). The history view appears, with the most recent search placed at the top of the list.

   When '↑' and/or '↓' appears on the left side of the window, (▼) (▲) or (∨) (∧) can be used to scroll the window.



3. Use the number keys to select a desired word in the list (press (1) in this example).

   The detail view of the selected word appears.

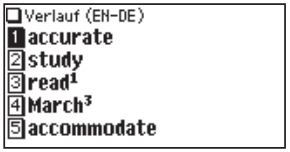


Note:

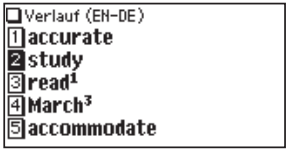
- Each dictionary has its own history list for headwords and phrases (exception: *Duden – Die deutsche Rechtschreibung*). These history lists are installed and updated automatically.
- To view the history list, press (VERLAUF) at the initial screen of each dictionary, and the initial screen of each phrase search.
- Truncated words in the list are indicated with a trailing '...' at the end.
- Each history list can contain up to 30 items. The oldest item will be deleted as item count exceeds 30.

Deleting a history item

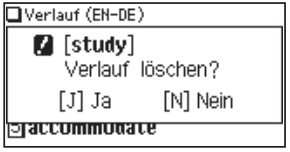
1. Display the history list on the screen.



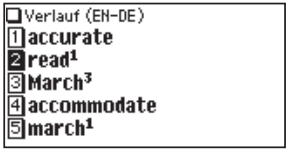
2. Use the (▼) or (▲) key to place the cursor on the item to be deleted (select 'study' in this example). The reverse colour indicates the selected item.



3. Press (←). A confirmation dialogue for deletion appears.

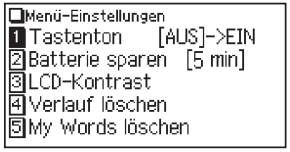


4. Press (J). The selected item is deleted.

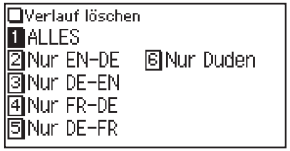


Deleting the history list of a dictionary

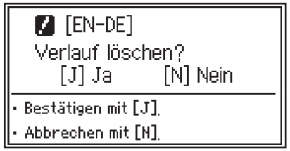
1. Press (MENU), then (9) to open the Set-up menu.



2. Press (4) to select 'Verlauf löschen'.



3. Use the number keys to select the history list you wish to delete. A confirmation dialogue for deletion appears (press (2) in this example).
   - To delete all history lists, select 'ALLES'.
   - Selecting 'Nur EN-DE', 'Nur DE-EN', 'Nur FR-DE' or 'Nur DE-FR' will also delete the history list of each phrase search.



4. Press (J). The selected history is deleted and the main menu appears.

Using the Calculator function

The built-in calculator in the Electronic Dictionary can perform twelve-digit arithmetic calculations with memory function. To access the Calculator function, press [MENU] [7].

Prior to initiating calculations

- This product uses a comma ',' as a decimal separator; a period is used as a thousand separator.
- Before performing any calculation, press [R·CM] [R·CM] [2nd] [ENTF] to clear the memory and the display.
- To start a calculation with a negative number, place a subtraction sign by pressing [−] at the beginning of the calculation.
- If you wish to correct a wrong entry, press [C·CE] and re-enter the figure.
- In the calculation examples found in this section, indications and icons that may appear on the screen ('=', 'M+', 'M–', '+', '–', '×', and '÷') are abbreviated or are not shown. These icons appear to show you the interim result of calculations. For example, the '=' icon appears on the screen when [=] or [%] is pressed, while icons such as 'M+' and '+' appear after each corresponding key has been pressed.
- An 'M' is shown when a value other than 0 is put in the memory. To clear the content of the memory, press [R·CM] twice. Note that the pressing of [M+] or [M–] also functions as [=].
- Press [ENTER] to enter '='. To input ',' (decimal separator), press [β].
- An error message 'E' is displayed if:
  - the integer section of a calculation result exceeds 12 digits
  - the memory exceeds 12 digits
  - an attempt is made to divide a number by zero.

  Press [C·CE] to clear the error condition.

Calculation examples

Example	Operation	Display
(–24) ÷ 4 – 2 =	[C·CE] [−] 24 [÷] 4 [−] 2 [=]	–8,
34 + 57 =	34 [+] 57 [=] The second figure (57)	91,
45 + 57 =	45 [=] becomes the constant.	102,
	(Subtraction and division are performed in the same way as above.)	
68 × 25 =	68 [×] 25 [=] The first figure (68)	1.700,
68 × 40 =	40 [=] becomes the constant.	2.720,
What is 10% of 200?	200 [×] 10 [%]	20,
What percentage is 9 of 36?	9 [÷] 36 [%]	25,
200 + (200 × 10 %) =	200 [+] 10 [%]	220,
500 – (500 × 20 %) =	500 [−] 20 [%]	400,
$(4^3)^2$ =	4 [×] [=] [=] [×] [=]	4.096,
1/8 =	8 [÷] [=]	0,125
25 × 5 =	[R·CM] [R·CM] 25 [×] 5 [M+]	M 125,
–) 84 ÷ 3 =	84 [÷] 3 [M–]	M 28,
+) 68 + 17 =	68 [+] 17 [M+]	M 85,
(Total) =	[R·CM]	M 182,
	[R·CM] [R·CM] 12 [+] 14 [M+]	M 26,
135 × (12 + 14) =	135 [×] [R·CM] [=]	M 3.510,
(12 + 14) ÷ 5 =	[R·CM] [÷] 5 [=]	M 5,2
	[R·CM] [R·CM] [2nd] [ENTF]	0,
123456789098 × 145 =	123456789098 [×] 145 [=]	E 17,9012344192
	[C·CE]	17,9012344192
	(17,9012344192 × 10^{12} = 17901234419200)	

Using the Converter function

The Converter function consists of two converters: the Currency converter, and the Metric converter.

Currency converter (Währungsumrechner)

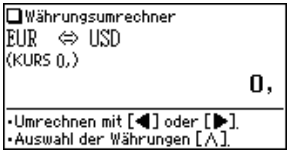
Setting a currency rate

One conversion rate can be set.

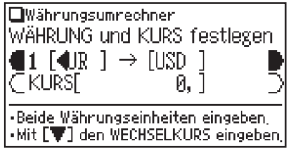
<Example>

Set the following rate: €1 = US$ 1,2

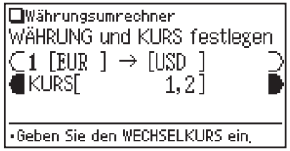
1. Press (MENU) (8) (1) to access the Currency converter.



2. Press (∧). The input fields for the currency name and rate appear.

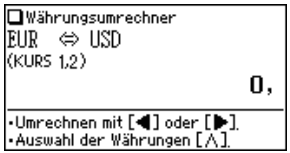


3. Use the (▲) (▼) keys to place the cursor at the desired input field, then input the currency name and its rate. In this example, press (▼) and input '1,2'.
   - The currency name field of currency converter is temporarily pre-defined, as seen in the above example.



   - When inputting the desired currency name, press (2nd) (ENTF) to clear the input field and use no more than four letters. Use the (◀) (▶) keys to set the cursor on the left/right of the currently selected input field.
   - In the left input field, enter the base currency name. In the input field on the right, place the currency name of which you wish to set the conversion rate.
   - Up to 10 digits (excluding the decimal point) can be entered in the currency rate input field.

4. Press (ENTER). The currency name and its rate are set.



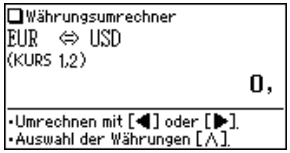
Converting currencies

The conversion calculation can be performed using the previously set conversion rate.

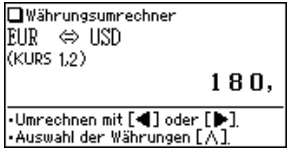
<Example>

Convert €180 to US$ when setting the rate: C= 1 = US$ 1,2.

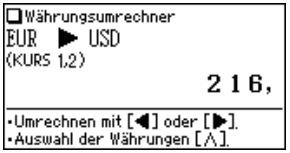
1. Press (MENU) (8) (1) to display the currency converter.



2. Input '180'. You may input a simple formula, such as '36 × 5 =', instead.



3. Press ▶ to execute the conversion from € to US$. The converted value of US$ 216 is displayed.



   - Pressing ◀ executes a US$-to-€ conversion. In this case, the converted value of C= 180 will be displayed.
   - The ◀ and ▶ arrows on the screen indicate the direction of conversion.
   - To initiate conversion of a different value, just enter the value to be converted, or press C·CE to clear the value in the input field prior to entering the new conversion.
   - Press ESC to return to the Converter menu.

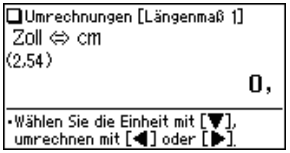
Metric converter (Metrische Umrechnungen)

Conversions between different units of measurement (length, mass, etc.) can be performed.

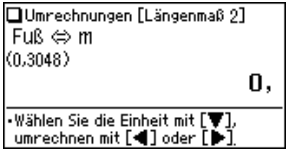
<Example>

Convert 40 feet to metres.

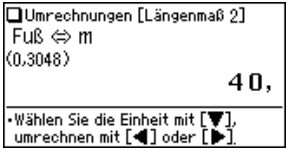
1. Press MENU 8 2 to access the Metric converter.



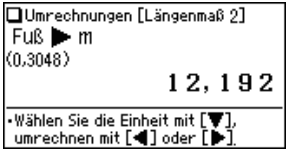
2. Use ▲ ▼ to select 'Umrechnungen [Längenmaß 2]'.



3. Input '40'. You may input a simple formula, such as '25 + 15 =', instead.



4. Press ▶. The value in feet is converted to the metric value.



   - Press ◀ to convert from the metric value to feet. In this case, the given value '40' will be taken as the metric value to be converted to feet.
   - The ◀ and ▶ arrows on the screen indicate the direction of conversion.
   - To initiate conversion of a different value, just enter the value to be converted, or press C·CE to clear the value in the input field prior to entering the new conversion.

- Use the ▼ or ▲ key to select one of the other Metric converters.
- Press ESC to return to the Converter menu.

Units capable of being converted

The following conversion formulae can be utilised.

Längenmaß 1 (length 1):	Zoll ⇔ cm *
Längenmaß 2 (length 2):	Fuß ⇔ m *
Längenmaß 3 (length 3):	Yard ⇔ m *
Längenmaß 4 (length 4):	Meile ⇔ km *
Längenmaß 5 (length 5):	sm (Seemeile) ⇔ m **
Gewicht 1 (weight 1):	Unze ⇔ g *
Gewicht 2 (weight 2):	Pfund ⇔ kg *
Temperatur (temperature):	°F ⇔ °C *
Volumen 1 (volume 1):	Pint ⇔ Liter *
Volumen 2 (volume 2):	Gallone (UK) ⇔ Liter *
Volumen 3 (volume 3):	Gallone (US) ⇔ Liter *
Volumen 4 (volume 4):	bbl (Barrel, Fass) ⇔ l **
Volumen 5 (volume 5):	RT (Registertonne) ⇔ m^3 **
Flächenmaß 1 (surface area 1):	Quadratmeile ⇔ km^2 *
Flächenmaß 2 (surface area 2):	Morgen ⇔ Hektar *
Andere 1 (other 1):	PS ⇔ kw **
Andere 2 (other 2):	cal ⇔ J **

* Units and rates for metric conversions are based on ISO specifications.
** Units and rates for metric conversions are based on DIN specifications.

Note:

- There may be a slight error in the conversion result due to the rounding off of the number. Use the result for reference only.

Appendices

Replacing the battery

Battery used

- Use only the specified alkaline battery.

Type	Size / Model	Quantity
Alkaline battery	Size “AAA” / LR03	1

- **Please do not use rechargeable battery, this can lead to a malfunction of the device.**

Precautions

- Fluid from a leaking battery accidentally entering an eye could result in serious injury. Should this occur, wash with clean water and immediately consult a doctor.
- Should fluid from a leaking battery come in contact with your skin or clothes, immediately wash with clean water.
- If the product is not to be used for some time, to avoid damage to the unit from a leaking battery, remove it and store in a safe place.
- Do not leave an exhausted battery inside the product. It may leak and damage the product.
- Keep batteries out of the reach of children.
- Incorrect handling of batteries may introduce risk of explosion.
- Do not throw batteries into a fire as they may explode.
- Make sure the new battery is the correct type before fitting.
- When installing, orientate the battery correctly as indicated in the unit.
- The battery packaged with this product may be partially exhausted during the shipment and/or storage period, and may need to be replaced sooner than expected.

When to replace the battery

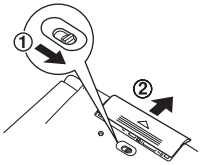
Replace the battery immediately in the following cases:

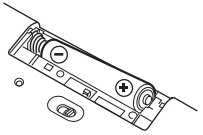
- When BATT is displayed.
- When the message ‘Bitte die Batterie ersetzen!’ appears upon turning the power on.

Note:

- If you do not follow the procedure describing the battery replacement, the My words list, the History list, as well as the Calculator's memory, may be cleared or altered. Also, Currency converter and the Set-up menu configurations may be reset.
- When BATT is displayed, the backlight will not operate.

Replacement procedure





1. Switch off the power by pressing (ON/OFF).
2. Set the battery replacement switch located on the bottom of the unit to the ‘REPLACE BATTERY’ position.
3. Remove the battery cover.
4. Remove the used battery and insert the one new battery. Make sure the battery polarity is correctly orientated.
5. Replace the battery cover.
6. Set the battery replacement switch to the ‘NORMAL OPERATION’ position.
7. Open the unit and press (ON/OFF) to turn the power on.

   The LCD contrast screen appears.

   - If the power cannot be switched on, try following steps 2 to 7 in the above procedure again. Should this fail, then follow the reset procedure on the following page.
8. Follow the instructions on the screen to adjust the LCD contrast (see step 7 of the procedure on page 5).

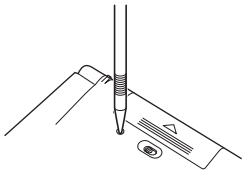
Reset procedure if trouble occurs

Exposure to a strong physical shock or powerful electrical fields may render the keys inoperable, to the point that the power cannot be switched on. If such case is suspected, try following the procedure below.

Reset procedures

1. Press the RESET switch located on the bottom of the unit, with the tip of a ball-point pen or similar object. Do not use an object with a breakable or sharp tip.

   The message 'Möchten Sie das System neu starten?' appears.



2. Press (J) to initialize the unit.
   - A message 'Bereit!' is momentarily displayed, followed by the LCD contrast adjustment screen.
   - If (N) is selected, then the unit will not be initialized.
3. Follow the instructions on the screen to adjust the LCD contrast (see step 7 of the procedure on page 5).

Note:

- **The reset procedure will clear the My words list, the History list, and Calculator's memory, as well as to reset the Currency converter and the Set-up menu configurations. To avoid these, you may press (N) at step two of the above.**
- After the (N) key is pressed as in the case above, or even when the (ON/OFF) key is pressed, the reset procedure may automatically be initiated due to the corrupted data. When this occurs, the message 'Initialisiert!' will be displayed, followed by the LCD contrast screen.

Specifications

Model:	PW-E420
Product name:	Electronic Dictionary
Display:	159 × 80 dot matrix LCD
Number of entries:	• Langenscheidt Handwörterbuch Englisch: Approx. 270,000 keywords and phrases • Langenscheidt Handwörterbuch Französisch: Approx. 255,000 keywords and phrases • Duden – Die deutsche Rechtschreibung: Approx. 135,000 keywords with approx. 500,000 examples, meaning explanations and information on word divisions, pronunciation, grammar and etymology
Calculator function:	12-digit calculation of addition, subtraction, multiplication, division, percentage, memory calculation, etc.
Converter function:	12-digit conversion of currency and measurement
Power consumption:	0.23 W
Operating temperature:	0°C - 40°C (32°F - 104°F)
Power supply:	1.5 V ⎓ (DC): Alkaline battery LR03 (size 'AAA') × 1
Battery life:	• Approx. 200 hours If data is continuously displayed at 25°C (77°F) without backlight • Approx. 70 hours If data is searched for 5 minutes and displayed for 55 minutes per hour at 25°C (77°F) without backlight

• Approx. 55 hours
If data is searched for 5 minutes and displayed for 55 minutes with 2 minute backlight use per hour at 25°C (77°F)

Note: May vary according to various usage conditions

Weight (including battery): Approx. 155 g (0.35 lb)

Dimensions (when closed): 125 mm (W) × 79.4 mm (D) × 16.8 mm (H)
4-29/32" (W) × 3-1/8" (D) × 21/32" (H)

Accessories: Alkaline battery LR03 (size 'AAA') × 1, operation manual

Troubleshooting

Refer to the list of possible symptoms, and solutions may be found here.

The unit cannot be switched on.

- Check if the battery is not drained. See page 43.
- Check the battery replacement switch; it should be set at the 'NORMAL OPERATION' position. See page 5.
- Check the polarity of the battery. See page 5.
- Verify the LCD contrast setting; the power may be switched on, but the message on the screen may not be visible. See page 14.
- If the above settings appear normal, then press the RESET switch. See page 44.

The backlight cannot be switched on.

- Check if the battery is exhausted. See page 43.

The screen is dark or light.

- Adjust the LCD contrast. See page 14.

The key sound cannot be heard.

- The key sound may be set to OFF. See page 13.

The unit does not respond to a key press.

- Press the RESET switch. See page 44.

The unit shuts off automatically.

- The Auto power off function is in action. The activation interval of the Auto power off function can be adjusted. See page 13.

The desired word cannot be found.

- A variant form of the word may have been entered. Enter the original form.
- Use the Spell check function to verify the correct spelling.

Product support

If you have read this operation manual, but you still require product support, you can visit our web site at:

http://www.sharp.de/electronic-dictionary/

http://www.sharp.at/electronic-dictionary/

Further information of the dictionaries

Langenscheidt Handwörterbuch Englisch

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Duden – Die deutsche Rechtschreibung

Sprache in Zahlen

Vorbemerkung

Schon seit vielen Jahren erreichen die Dudenredaktion immer wieder Fragen z. B. nach dem längsten deutschen Wort, dem Wort mit den meisten aufeinanderfolgenden Konsonanten oder den häufigsten Wörtern im Deutschen ganz allgemein. Dank der großen elektronischen Textdatenbanken, die heute verfügbar sind, und des verstärkten Einsatzes computerlinguistischer Methoden in der Wörterbucharbeit können solche Fragen inzwischen recht gut beantwortet werden.

Möchte man wissen, wie häufig bestimmte Phänomene im Deutschen vorkommen, stellt sich die Frage, auf welcher Basis man denn solche Berechnungen anstellen kann bzw. muss, damit diese auch repräsentativ für »das Deutsche« sind. Vorweggenommen sei, dass es »die« deutsche Text- bzw. Sprachbasis zur Erforschung »der« deutschen Sprache [bislang] nicht gibt. Es gibt jedoch relativ zuverlässige Annäherungen von verschiedenen Seiten, die im besten Fall in ihren Ergebnissen übereinstimmen.

Die in den folgenden Abschnitten präsentierten Grafiken und Tabellen beruhen auf Untersuchungen, die die Dudenredaktion auf der Grundlage eigener Datenbasen vorgenommen hat. Eine zentrale Basis stellt das vorliegende Werk dar, der Rechtschreibduden, der in dieser Auflage rund 140 000 Stichwörter verzeichnet, eine andere das Dudenkorpus. Das Dudenkorpus ist eine von der Dudenredaktion aufgebaute elektronische Volltextdatenbank mit mehr als 2,1 Milliarden Wortformen (Stand Frühjahr 2012). Bei den Texten handelt es sich um journalistische und belletristische Texte sowie um Sach-, Fach- und Gebrauchstexte, wobei die journalistischen Texte den größten Anteil ausmachen. In zeitlicher Hinsicht deckt das Korpus die Jahre 1995 bis heute ab.

Die Zahlen, die in den folgenden Abschnitten in Bezug auf den Rechtschreibduden präsentiert werden, beziehen sich immer auf die dort verzeichneten Stichwörter, also auf das, was fett gedruckt ist, z. B. »gutschreiben« im folgenden Artikel:

gut|schrei|ben (anrechnen); sie versprach, den Betrag gutzuschreiben

Bei den Zahlen, die sich im Folgenden auf das Dudenkorpus beziehen, unterscheiden wir zwischen den Wortformen, wie sie in einem Fließtext vorkommen, und den mittels einer (maschinellen) Analyse auf ihre Grundform zurückgeführten Wortformen.

Unter einer Wortform verstehen wir jedes einzelne Wort eines Fließtextes. Dieses kann, je nach Wortart, entweder gebeugt oder ungebeugt vorkommen. Der Satz Sie versprach, den Betrag gutzuschreiben beispielsweise besteht aus den Wortformen »Sie«, »versprach«, »den«, »Betrag« und »gutzuschreiben«.

Die Grundform eines Wortes ist zum Beispiel bei Verben der Infinitiv, bei Substantiven normalerweise der Nominativ Singular oder bei Artikeln der Nominativ Singular. Die Grundformen zu dem oben angeführten Beispiel lauten «sie«, »versprechen«, »der«, »Be-trag«, »gutschreiben«. Diese Grundformen sind gleichzeitig auch die Stichwörter, die in einem Wörterbuch wie dem Duden verzeichnet sind.

Wortform im Korpus	Grundform im Korpus/Stichwort im Duden
Sie	sie
versprach	versprechen
den	der
Betrag	Betrag
gutzuschreiben	gutschreiben

In einem Wörterbuch kommt jedes Stichwort normalerweise nur einmal vor. In einem Text hingegen können Wortformen mehrmals vorkommen, so zum Beispiel in dem Satz:

»Wer täglich das tut, was täglich getan werden muss, hat viel zu tun.«

Aus wie vielen Wörtern besteht dieser Satz? Beim einfachen Zählen kommt man auf 13; zählt man aber nur die verschiedenen Wörter, sind es nur 12, denn »täglich« kommt zweimal vor. Reduziert man alle Wörter auf ihre Grundform und zählt nur, wie viele verschiedene Grundformen es gibt, dann heißt das Ergebnis 10, denn »tun« kommt dreimal (in den Formen tut, getan, tun) vor.

Wenn in diesem Kapitel die Rede von Wortformen und Grundformen ist, ist mit Wortformen immer die erste Zählweise (13), mit Grundformen immer die letzte Zählweise (10) gemeint.

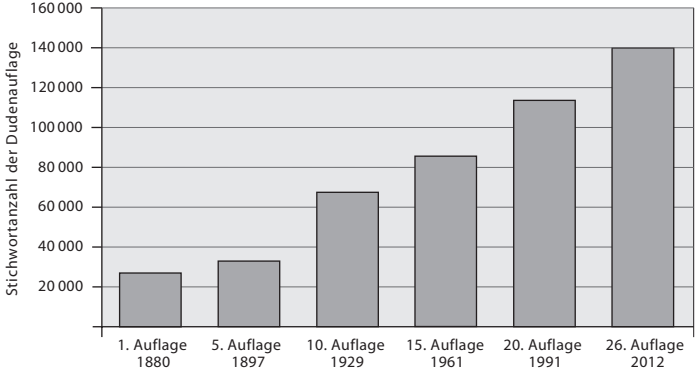
Zum Umfang des deutschen Wortschatzes

Exakte Angaben über den Umfang des deutschen Wortschatzes sind nicht nur deshalb unmöglich, weil ständig Wörter neu gebildet und aus anderen Sprachen entlehnt werden. Eine genaue Feststellung wird auch dadurch erschwert, dass die Abgrenzung der festen Bestandteile unseres (Allgemein)wortschatzes von den Situations- oder Gelegenheitsbildungen (etwa »Autohimmel« in dem Satz »Der neue Sportwagen ist ein Stern am Autohimmel «) und den fach- und sondersprachlichen Wörtern nicht möglich ist. Im Allgemeinen setzt man den Wortschatz der deutschen Gegenwartssprache auf zwischen 300 000 und 500 000 Wörter (Grundformen) an. Der aktive Wortschatz eines deutschen Durchschnittssprechers wird heute auf 12 000 bis 16 000 Wörter (davon etwa 3 500 Fremdwörter) geschätzt. Ohne Schwierigkeiten verstanden werden mindestens 50 000 Wörter.

Der Rechtschreibduden enthält rund 140 000 Stichwörter, das »Deutsche Wörterbuch« (1852–1971) von Jacob und Wilhelm Grimm etwa 450 000, von denen aber zahlreiche nicht mehr in Gebrauch sind. Das Dudenkorpus hat nach heutigem Stand (Frühjahr 2012) einen Umfang von rund 10 Millionen unterschiedlichen Wörtern (Grundformen). Die enorme Diskrepanz zum Umfang eines Wörterbuchs erklärt sich dadurch, dass die meisten Wörter im Dudenkorpus nur ein- bis wenige Male vorkommen und deshalb keine Aufnahmekandidaten für ein Wörterbuch sind. Es handelt sich dabei oft um Namen oder um mehrteilige Zusammensetzungen, deren Bedeutung sich leicht aus der Bedeutung der einzelnen Bestandteile erschließt (z. B. »Vampirdarstellerin« oder »Vogelschutzgutachten«). Während die einzelnen Bestandteile möglichst lückenlos in einem Wörterbuch wie dem Duden verzeichnet sein sollten, können die vielfältigen Zusammensetzungen, die im Deutschen möglich sind, schon allein aus Platzgründen niemals vollständig in einem gedruckten Wörterbuch enthalten sein.

Die Stichwortzahlen der Dudenauflagen

Mit jeder Auflage ist der Umfang des Dudens gewachsen. Als Konrad Dudens »Vollständiges Orthographisches Wörterbuch der deutschen Sprache« 1880 erschien, enthielt dieser sogenannte Urduden 27 000 Stichwörter. Bis heute hat sich der Umfang, wie die folgende Grafik zeigt, verfünffacht:



Die häufigsten Wörter in deutschsprachigen Texten

Von den knapp 10 Millionen unterschiedlichen Wörtern (Grundformen), die im Dudenkorpus enthalten sind, kommen die folgenden am häufigsten vor:

Rang	Wort	Rang	Wort
1.	der, die, das [bestimmter Artikel]	26.	aus
2.	in	27.	eine
3.	und	28.	nach
4.	sein	29.	wie
5.	ein	30.	ihr
6.	zu	31.	ich
7.	von	32.	um
8.	haben	33.	aber
9.	werden	34.	Jahr
10.	mit	35.	so
11.	an	36.	nur
12.	auf	37.	noch
13.	der, die, das [Relativpronomen]	38.	über
14.	sich	39.	wir
15.	für	40.	viel
16.	nicht	41.	man
17.	es	42.	oder
18.	sie	43.	vor
19.	er	44.	müssen
20.	auch	45.	sollen
21.	als	46.	all
22.	bei	47.	kein
23.	dies	48.	bis
24.	dass	49.	neu
25.	können	50.	wollen

Erstaunlicherweise machen die 100 häufigsten Wörter fast die Hälfte aller Wörter in den Texten des Dudenkorpus aus. Mit den häufigsten 2 841 Wörtern deckt man schon 75 % der Texte ab. Die restlichen 25 % werden von der Differenz zu den oben erwähnten 10 Millionen Grundformen gestellt. Das bedeutet ganz allgemein formuliert: Es gibt in deutschen Texten relativ wenige Wörter, die sehr oft vorkommen, und umgekehrt relativ viele Wörter, die nur sehr selten vorkommen.

Schlüsselt man die häufigsten Wörter des Dudenkorpus nach Wortarten auf, ergeben sich folgende Rangfolgen:

Im gesamten Dudenkorpus							
Rang	Die häufigsten Substantive	Die häufigsten Adjektive	Die häufigsten Verben	Rang	Die häufigsten Substantive	Die häufigsten Adjektive	Die häufigsten Verben
1.	Jahr	neu	werden	11.	Deutschland	letzt...	machen
2.	Uhr	ander...	haben	12.	Mann	alt	gehen
3.	Prozent	groß	sein	13.	Kind	hoch	stehen
4.	Euro	viel	können	14.	Ende	jung	lassen
5.	Million	erst...	müssen	15.	USA	nahe	sehen
6.	Zeit	deutsch	sollen	16.	Seite	zweit...	finden
7.	Tag	gut	sagen	17.	Woche	vergangen	bleiben
8.	Land	weit	geben	18.	Stadt	lang	liegen
9.	Mensch	eigen	kommen	19.	Berlin	wenig	dürfen
10.	Frau	klein	wollen	20.	Unternehmen	politisch	stellen

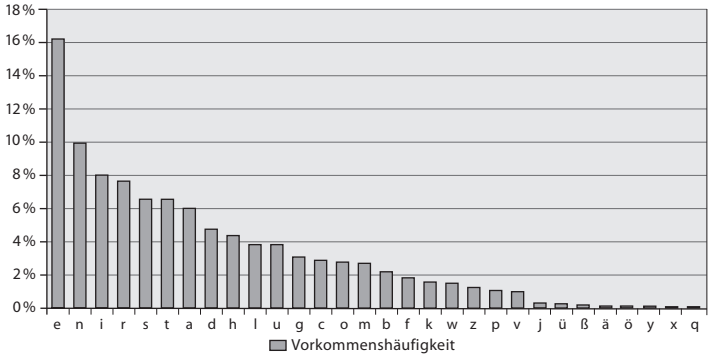
Die Liste der häufigsten Substantive zeigt, dass das Korpus stark durch Zeitungstexte geprägt ist. Betrachtet man zum Beispiel nur Romane oder Sach- und Fachtexte, verändert sich im Vergleich zu oben die Rangfolge und es tauchen neue Wörter in der Liste auf.

Welche Substantive, Adjektive oder Verben in deutschsprachigen Romanen am häufigsten vorkommen, zeigt die folgende Tabelle:

In Romanen des Dudenkorpus							
Rang	Die häufigsten Substantive	Die häufigsten Adjektive	Die häufigsten Verben	Rang	Die häufigsten Substantive	Die häufigsten Adjektive	Die häufigsten Verben
1.	Mann	ander...	haben	11.	Vater	lang	machen
2.	Frau	klein	sein	12.	Kind	jung	geben
3.	Hand	groß	werden	13.	Blick	weit	wissen
4.	Auge	gut	können	14.	Leben	nahe	sollen
5.	Tag	erst...	sagen	15.	Haus	eigen	lassen
6.	Zeit	viel	sehen	16.	Tür	einzig	stehen
7.	Jahr	alt	müssen	17.	Mensch	schwarz	fragen
8.	Kopf	ganz	kommen	18.	Wort	einig...	tun
9.	Mutter	letzt...	gehen	19.	Stimme	wenig	nehmen
10.	Gesicht	neu	wollen	20.	Herr	lieb	halten

Die häufigsten Buchstaben in deutschen Wörtern

Die folgende Grafik zeigt die Rangfolge der am häufigsten vorkommenden Buchstaben in allen Wortformen des Dudenkorpus, wobei Groß- und Kleinbuchstaben jeweils zusammengefasst sind:



Die längsten Wörter im Duden

Die folgende Tabelle zeigt die im Rechtschreibduden enthaltenen Stichwörter mit den meisten Buchstaben. Bei der Auswertung nicht berücksichtigt wurden Stichwörter, die aus mehreren mit Leerzeichen voneinander getrennten Wörtern bestehen, z. B. »Vereinigtes Königreich [Großbritannien und Nordirland]«, »vorgelesen, genehmigt, unterschrieben« oder »non scholae, sed vitae discimus«.

Die meisten Wörter stammen inhaltlich betrachtet aus den Bereichen Recht und Verwaltung. Bei allen handelt es sich um Substantive, und zwar Zusammensetzungen aus mindestens zwei, meistens sogar drei und mehr Bestandteilen:

Rang	Stichwort im Duden	Anzahl der Buchstaben (ohne Bindestriche)
1.	Kraftfahrzeug-Haftpflichtversicherung	36
2.	Donau-Dampfschifffahrtsgesellschaft	34
3.	Rhein-Main-Donau-Großschifffahrtsweg	33
4.	Arbeiterunfallversicherungsgesetz	33
5.	Bundesausbildungsförderungsgesetz	33
6.	Straßenverkehrs-Zulassungs-Ordnung	32
7.	Behindertengleichstellungsgesetz	32
8.	Steuervergünstigungsabbaugesetz	31
9.	Nahrungsmittelunverträglichkeit	31
10.	Lebensversicherungsgesellschaft	31

Die längsten Wörter im Dudenkorpus

Begibt man sich auf die Suche nach dem längsten Wort im Dudenkorpus, entdeckt man zum einen sehr individuelle, kreative Augenblicksbildungen wie »Schauspiele rbetreuungsflugbuchungsstatisterieleitungsgastspielorganisationsspezialist «[1] (85 Buchstaben) oder eher nüchterne wie »Steuerentlastungsberatungsvorgesprächsk oalitionsrundenvereinbarungen «[2] (68 Buchstaben). Zum anderen findet man viele ausgeschriebene Zahlwörter, z. B. »[Das] Neunmilliardeneinhundertzweiundneunzig millionensechshunderteinunddreißigtausendsiebenhundertsiebzigfache

« (104 Buchstaben). Solche Wörter kommen in Korpora in der Regel nur einmal vor.

Möchte man diese Bildungen ausschließen, kann man die Suche auf Wörter beschränken, die beispielsweise mindestens 5-mal im Korpus vorkommen.

Welche Wörter die Liste der so ermittelten längsten Wörter (Grundformen) im Dudenkorpus anführen, zeigt die folgende Tabelle. Sie stammen, wie im Duden, vorwiegend aus der Rechts- und Verwaltungssprache und sind ebenfalls substantivische Zusammensetzungen. Die längsten dieser »Bandwurmwörter« weisen allerdings bis zu 6 Bestandteile und rund 30 Buchstaben mehr auf als das längste Wort im Duden:

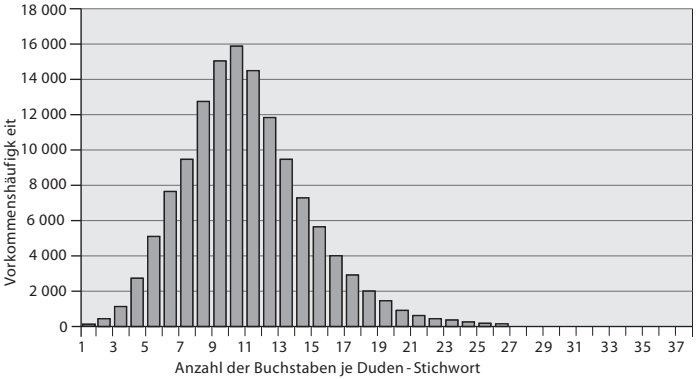
Rang	Wort im Dudenkorpus (Grundformen, mindestens 5-mal belegt)	Anzahl der Buchstaben
1.	Grundstücksverkehrsgenehmigungszuständigkeitsübertragungsverordnung	67
2.	Rindfleischetikettierungsüberwachungsaufgabenübertragungsgesetz	63
3.	Verkehrsinfrastrukturfinanzierungsgesellschaft	46
4.	Gleichgewichtsdichtegradientenzentrifugation	44
5.	Elektrizitätswirtschaftsorganisationsgesetz	43
6.	Mitarbeiterkapitalbeteiligungsgesellschaft	42
7.	Infrastrukturplanungsbeschleunigungsgesetz	42
8.	Verkehrswegeplanungsbeschleunigungsgesetz	41
9.	Hochleistungsflüssigkeitschromatographie	40
10.	Restriktionsfragmentlängenpolymorphismus	40

1 *Neue Zürcher Zeitung vom 23.10. 2002*

2 *Die Tageszeitung vom 29.5. 1997*

Durchschnittliche Länge eines deutschen Wortes

Die durchschnittliche Länge eines Stichwortes im Duden beträgt 10,6 Buchstaben. Wie sich die Anzahl der Stichwörter dabei auf die unterschiedlichen Wortlängen verteilt, zeigt die folgende Grafik:



Betrachtet man hingegen die durchschnittliche Wortlänge im Dudenkorpus, kommt man zu sehr unterschiedlichen Ergebnissen. Errechnet man den Durchschnitt aller im Dudenkorpus vorkommenden Wörter, also der 2,1 Milliarden Wortformen, ergibt sich ein Durchschnitt von 5,7 Buchstaben. Nimmt man als Berechnungsgrundlage hingegen nur die unterschiedlichen Wörter, also die 10 Millionen Grundformen, beträgt die durchschnittliche Länge 14,3 Buchstaben. Die relative Kürze der Wortformen resultiert aus der Tatsache, dass die meisten Wörter in Texten sehr kurz sind, z. B. »der«, »und«, »zu« usw. (s. dazu die Liste der häufigsten Wörter in deutschsprachigen Texten weiter oben). Die relative Länge der Grundformen verdankt sich der hohen Anzahl von Zusammensetzungen im Korpus.

Die Wörter mit den meisten aufeinanderfolgenden Vokalen

Die drei Stichwörter aus dem Rechtschreibduden mit den meisten aufeinanderfolgenden Vokalen, und zwar insgesamt 5, sind:

– zweieiig
– Donauauen *od.* Donau-Auen
– Treueeid

Bei diesen Wörtern handelt es sich um Zusammensetzungen. Einfache, also nicht zusammengesetzte oder abgeleitete Wörter mit 5 aufeinanderfolgenden Vokalen gibt es im Deutschen nicht.

Beispiele für Wörter, die 4 aufeinanderfolgende Vokale aufweisen, zeigt die folgende Tabelle, in der zwischen einfachen Wörtern und zusammengesetzten Wörtern unterschieden wird. Sie zeigt außerdem an, wie oft ein bestimmtes Vokalmuster, z. B. »iuea«, im Stichwortbestand des Rechtschreibdudens insgesamt vorkommt:

Einfaches Wort mit 4 aufeinanderfolgenden Vokalen	Häufigkeit der Vokalkombination in Dudenstichwörtern	Zusammengesetztes Wort mit 4 aufeinanderfolgenden Vokalen	Häufigkeit der Vokalkombination in Dudenstichwörtern
niueanisch	3	beieinander	14
hawaiianisch	3	Parteiausweis	6
Queue	2	armeeeigen	5
desavouieren	2	Lotterieeinnehmer[in]	4
Hawaiiinsel	2	Neuausgabe	4
Sequoia	2	Prärieauster	4
Hygieia	1	Bauaufsicht	3
miauen	1	Neueinstellung	3
Montesquieu	1	grauäugig	2
Pistoiaer	1	Blaueisenerz	1
pistoiaisch	1	Niveauunterschied	1
tatauieren	1	Schneeeule	1
		Seeaal	1
		Videoaufzeichnung	1
		Zweieurostück	1

Betrachtet man die Aneinanderreihung von Vokalen im Dudenkorpus, kommt man zu sehr ähnlichen Ergebnissen. Über die oben bereits zitierten Wörter »zweieiig«, »Donauauen« und »Treueeid« hinaus finden sich hier noch die folgenden Wortformen mit 5 aufeinanderfolgenden Vokalen:

– Bioeier
– Batterieeier
– Teeeier
– dreieiig
– Niveauausgleich
– Milieuaufklärer (bei der Polizei)
– Queueing (EDV)

Darüber hinaus finden sich im Dudenkorpus zahlreiche Namen mit 5 aufeinanderfolgenden Vokalen, z. B. »Azzaaoui«, »Maaouiya« oder »Zaouia«, sowie Anlehnungen an die gesprochene Sprache mit Schreibungen wie »uiuiuiui«, »neeeeiin« oder »süüüüüß«.

Wörter mit 4 aufeinanderfolgenden Vokalen gibt es im Dudenkorpus aufgrund des wesentlich größeren Umfangs deutlich mehr als im Rechtschreibduden. Darunter befinden sich zahlreiche Zusammensetzungen (z. B. »Technologieausrüster«), viele Personen- oder geografische Namen (z. B. »Miricioiu« oder »Kilauea«) oder auch einfach Tippfehler (z. B. »Gleisdreieick«). Aus der Fülle ergeben sich viele Vokalkombinationsmuster, die über das hinausgehen, was die Tabelle oben zeigt.

Die Wörter mit den meisten aufeinanderfolgenden Konsonanten

Der »Borschtsch«, eine russische Suppe, ist das einzige einfache (also nicht zusammengesetzte oder abgeleitete) deutsche Wort mit 8 aufeinanderfolgenden Konsonanten.

Lässt man bei der Suche nach dem Wort mit den meisten aufeinanderfolgenden Konsonanten auch Zusammensetzungen zu, findet man im Rechtschreibduden außerdem die folgenden Wörter mit jeweils 8 Konsonanten:

– Deutschschweiz, Deutschschweizer[in], deutschschweizerisch
– Welschschweizer[in], welschschweizerisch
– Angstschweiß
– Geschichtsschreibung
– Rechtsschrift
– Unterrichtsschritt

Das Dudenkorpus weist ebenfalls den »Borschtsch« als das (einfache) Wort mit den meisten aufeinanderfolgenden Konsonanten aus. Die Liste der Zusammensetzungen mit 8 Konsonanten hintereinander ist recht lang, sodass hier nur einige repräsentative Beispiele gezeigt werden können. Wie in den oben angeführten Wörtern auch beginnt der zweite Bestandteil der Korpuswörter meistens mit der Buchstabenkombination *sch + l, m, n, r* oder *w*, etwa in:

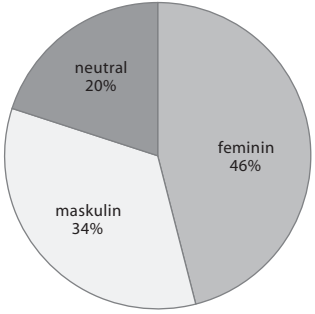
– angstschlotternd
– Weihnachtsschmuck
– nächstschnellere
– Kunstgeschichtsschreibung
– Herbstschwimmfest

Die Verteilung der Artikel (Genusangabe) im Rechtschreibduden

Die meisten deutschen Substantive werden von einem Artikel begleitet, zum Beispiel »*der* Bumerang« (maskulin), »*die* Untersuchung« (feminin) oder »*das* Gewinnspiel« (neutral). Einige wenige Substantive werden auch artikellos gebraucht, z. B. »Aids«, »Allerheiligen« oder »Donnerlittchen«. Sie machen im Rechtschreibduden weniger als 0,1 % aus.

Von den Substantiven mit Artikel, die im Rechtschreibduden verzeichnet sind, weisen 98,7 % nur einen einzigen Artikel auf. Knapp 1,3 % der Substantive können mit zwei Artikeln gebraucht werden, wobei einer der Artikel oft nur selten, regional begrenzt oder fachsprachlich gebraucht wird. Lediglich 0,02 % der Substantive können alle drei Artikel mit sich führen.

Wie sich die Artikel innerhalb der Gruppe der Substantive mit lediglich einem Artikel mengenmäßig verteilen, zeigt die folgende Grafik:



Die häufigste Kombination der Artikel von Substantiven mit zwei Artikeln ist die Kombination maskulin/neutral (knapp 70 %), z. B. bei

der oder *das* Alcopop

der oder *das* Terminal

der oder *das* Virus

An zweiter Stelle steht die Kombination maskulin/feminin (18 %), z. B. bei

der oder *die* Abscheu

der oder *die* Appendix

der oder *die* Fussel

An letzter Stelle steht die Kombination feminin/neutral (gut 12 %), z. B. bei

die oder *das* Aerobic

die oder *das* Consommé

die oder *das* E-Mail

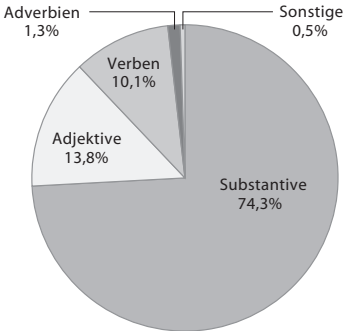
Es gibt nur sehr wenig Wörter (unter 20), die alle drei Artikel aufweisen. Hierzu zählen z. B:

der, die oder *das* Bookmark

der, die oder *das* Joghurt

der, die oder *das* Triangel

Die Verteilung der Wortarten im Rechtschreibduden



Wie die Grafik links zeigt, stellen die Substantive mit 74,3 % die größte Gruppe der im Rechtschreibduden verzeichneten Stichwörter dar. Mit großem Abstand folgen die Adjektive (13,8 %), dann die Verben (10,1 %). Adverbien machen lediglich 1,3 % der Stichwörter aus.

Deutlich unterhalb der 1-Prozent-Grenze liegen Interjektionen, Präpositionen und Pronomen (insgesamt rund 540), das Schlusslicht bilden die Konjunktionen, Partikeln und Artikel, deren Zahl sich zusammengenommen auf nicht einmal 100 beläuft.

Information on the Disposal of this Equipment and its Batteries

IF YOU WISH TO DISPOSE OF THIS EQUIPMENT OR ITS BATTERIES, DO NOT USE THE ORDINARY WASTE BIN ! DO NOT PUT THEM INTO A FIREPLACE !

1. In the European Union

Used electrical and electronic equipment and batteries must be collected and treated SEPARATELY in accordance with law. This ensures an environment-friendly treatment, promotes recycling of materials, and minimizes final disposal of waste. Each household should participate ! ILLEGAL DISPOSAL can be harmful to human health and the environment due to contained hazardous substances ! THIS SYMBOL appears on electrical and electronic equipment and batteries (or the packaging) to remind you of that ! If 'Hg' or 'Pb' appears below it, this means that the battery contains traces of mercury (Hg) or lead (Pb), respectively.

Take USED EQUIPMENT to a local, usually municipal, collection facility, where available. Before that, remove batteries. Take USED BATTERIES to a battery collection facility; usually a place where new batteries are sold. Ask there for a collection box for used batteries. If in doubt, contact your dealer or local authorities and ask for the correct method of disposal.

2. In other Countries outside the EU

If you wish to discard this product, please contact your local authorities and ask for the correct method of disposal.

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PRINTED IN CHINA
12FC-70EC